Morae Recorder User Guide

Release 3.1

Welcome to Morae

Morae is the premier software for deeply understanding customer experiences…and sharing those insights clearly and powerfully. From usability testing to focus groups and beyond, Morae helps you transform designs and marketing to make things people love.

Want to test your design? Morae makes it easy to pinpoint usability problems in software applications, websites, prototypes, or mobile devices. Install Morae on a laptop to test at a conference or in the field!

The software captures every nuance of your testing session. See the look on a participant's face, hear the frustration in her voice, and discover hidden problems in your product or site. Search across recordings, automatically calculate and graph standard metrics, and more.

Doing market research? Use Morae with up to two video cameras to record a focus group or in-depth interview. Type notes and flag important moments as you go—all your observations are indexed to the digital video on your hard drive, eliminating hours of tedious work.

When it's time to present your findings, simply drag and drop video clips to produce a highlight reel. Export charts, screenshots, and videos in standard formats…or send them directly to Microsoft Office with a click!

Work faster, more flexibly, and deliver stronger results with Morae.

Morae consists of three applications – Morae Recorder, Morae Observer and Morae Manager. These three applications work together to record, observe, log, analyze and share a user's experience.

See also:

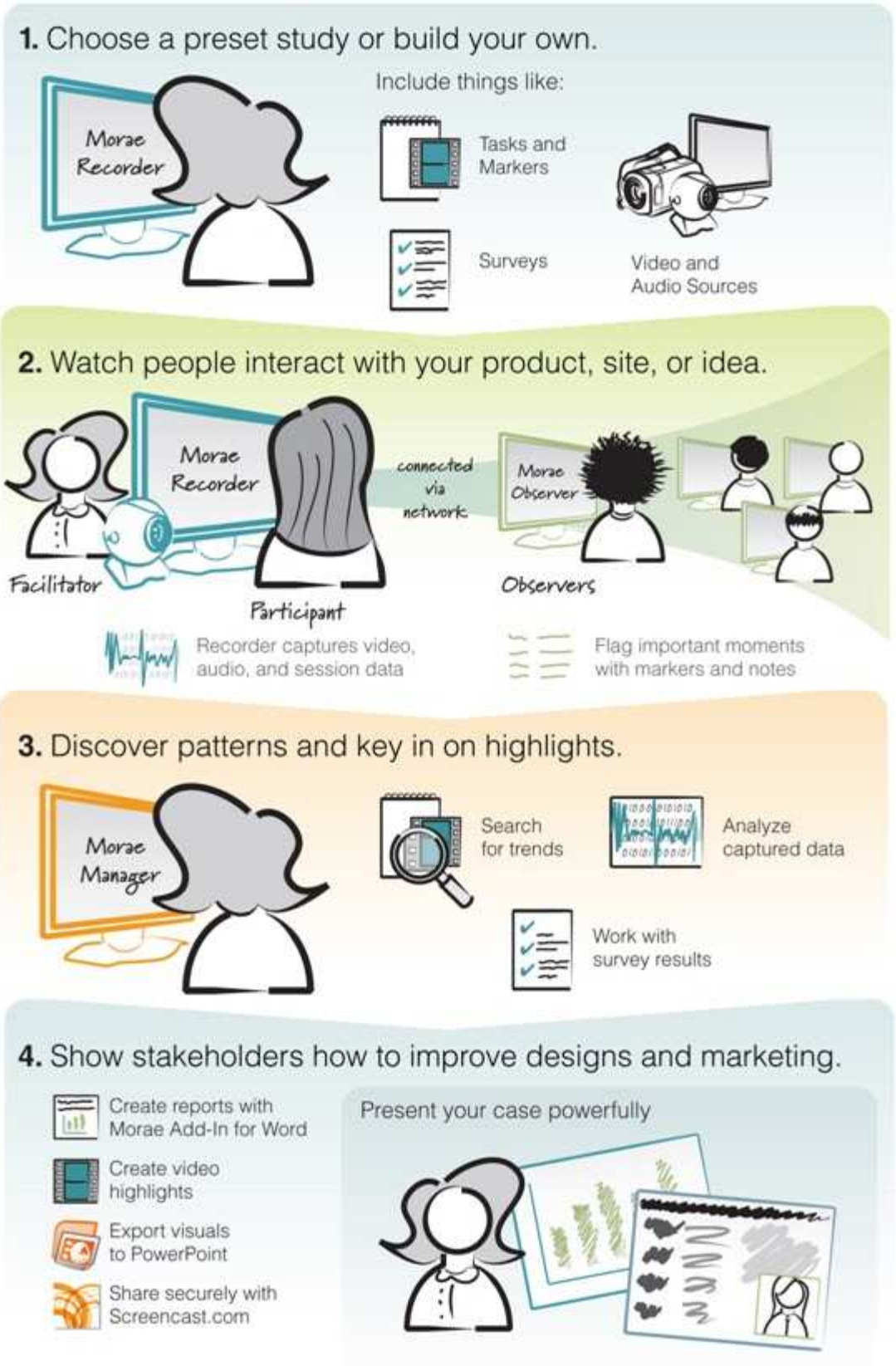
- **Morae Overview**
- **Quick Overview of Morae Applications**
- **System Requirements**
- **Getting Help with Morae**
- **Welcome to Morae Recorder**
- **Get to Know Morae Recorder**
- **Study Configurations**
- **Define Recording Details**
- **Define Study Details**
- **Tips and Reference Information**

Morae Overview

Morae reduces the amount of work needed, not only at setup, but also during the data logging, analysis, reporting and presentation stages.

Based on TechSmith's patented Rich Recording Technology (RRT), Morae is a complete solution that records the computer screen and camera video and also automatically creates a synchronized index of events occurring behind the scenes in applications and in the operating system. You can search screen and video recordings for specific events that occurred — like when a user viewed a Web page, clicked a link, pressed a certain key, opened a dialog box or viewed specific text. You can easily perform in-depth analysis, log tasks, create reports and quickly create video presentations to share.

See also **Quick Overview of Morae Applications**.


1. Choose a preset study or build your own.
Morae Recorder
Include things like:
Tasks and Markers
Surveys
Video and Audio Sources
2. Watch people interact with your product, site, or idea.
Morae Recorder
Facilitator
Participant
connected via network
Morae Observer
Observers
Recorder captures video, audio, and session data
Flag important moments with markers and notes
3. Discover patterns and key in on highlights.
Morae Manager
Search for trends
Analyze captured data
Work with survey results
4. Show stakeholders how to improve designs and marketing.
Create reports with Morae Add-In for Word
Create video highlights
Export visuals to PowerPoint
Share securely with Screencast.com
Present your case powerfully

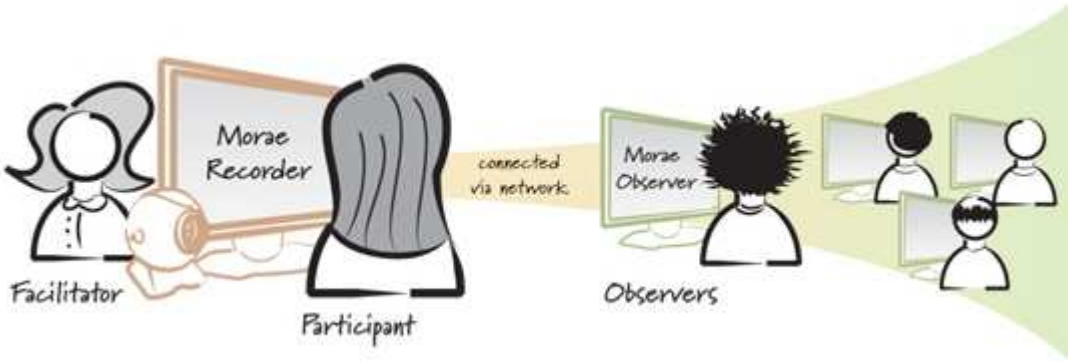
Quick Overview of Morae Applications

Morae includes three applications: **Morae Recorder**, **Morae Observer**, and **Morae Manager**. These components work together to provide an easy-to-use, total recording system based on TechSmith's patented Rich Recording Technology (RRT).

Record – Morae Recorder

Utilizing RRT, Morae Recorder creates a complete chronicle of the events that occur behind the scenes in applications and the operating system, as well as the onscreen and keyboard activity of the user. These data streams are recorded in sync with video of the user (through a web camera or other camera device) and audio of the user (through a microphone). Because Recorder runs silently in the background, it never disturbs the user. Recorder captures only the input streams you specify during configuration. Recorder saves the recording in a file format you can open in Morae Manager for analysis.

Observe and Log – Morae Observer



Morae Observer provides support for one or multiple computers to connect over a network to a computer running Recorder. This flexibility allows your entire usability team to observe the screen and camera video and hear the audio of the user, streaming from the Recorder source computer. Anyone logged into an Observer computer can add markers during recording complete with text notes. Tasks are logged by one Observer designated as the task logger. Observer automatically saves and indexes the markers and tasks with the accompanying video and audio streams. The camera video, screen video and audio streams can be saved locally in a WMV file for immediate playback. Utilizing multiple Observers, usability teams can conduct collaborative user experience testing.

Analyze, Graph, and Share – Morae Manager

Within Morae Manager, you can start new projects and edit existing projects, configure Recorder settings, open and analyze recordings, create graphs of your analysis and metrics and create a presentation video.

Rich Recording Technology automatically indexes the screen and video recordings collected by Recorder, allowing you to easily search through recordings in Morae Manager.

You can isolate tasks, important points in the video, add text notes, annotate with audio and quickly create video highlights to share. You can display the screen video with the video of the user as a picture-in-picture image.

System Requirements

These are the same for all three Morae components on desktops and laptops.

Minimum

- Windows XP or Vista
- 2.0 GHz Pentium M, 3.0 GHz Pentium 4, or equivalent processor
- 1 GB RAM or more
- Dedicated video card with at least 64MB of dedicated video memory
- PCI Express graphics
- DirectX version 9.0 or later
- Windows-compatible sound card, microphone, and speakers
- Approximately 10-15 MB disk space per minute for recording and highlight video creation
- Networked computer with 10 Mbps (Required for Observer)
- Microsoft Windows compatible FireWire (IEEE 1394) card for DV cameras
- Bluetooth-capable computer or Bluetooth adapter (Required for logging with a remote)
- Wii Remote (Required for logging with a remote)

Recommended

- Windows XP or Vista
- 2.0 GHz Core 2 Duo or equivalent processor
- 2 GB RAM or more
- Dedicated video card with at least 128MB of dedicated video memory
- PCI Express x16 graphics
- DirectX version 9.0c or later
- Windows-compatible sound card, microphone, and speakers
- Approximately 10-15 MB disk space per minute for recording and highlight video creation
- Networked computer with 100 Mbps or higher (Required for Observer)

- Microsoft Windows compatible FireWire (IEEE 1394) card for DV cameras
- Bluetooth-capable computer or Bluetooth adapter (Required for logging with a remote)
- Wii Remote (Required for logging with a remote)

Getting Help with Morae

Several resources are available to help when you run into questions or problems with Morae.

Morae Help Files

Each of the Morae components has its own Help file. Recorder, Observer, and Manager's Help files contain detailed information describing how to use Morae. Access the Help files through the Help menu or Help buttons found in the user interface.

To open a help topic for the screen or area you are currently using, press **<F1>** on your keyboard.

Morae Learning Center

For additional help, videos, and tutorials see the **Morae Learning Center**.

TechSmith Technical Support

We provide help with Morae installation-related issues at no cost. If you experience problems installing Morae, search our **Knowledge Base**. If you don't find your answer there, use the Contact Support tab in the Knowledge Base to send your question to TechSmith Technical Support.

TechSmith Web Site

Additional support resources are available online at **TechSmith's website**.

Balloon Tips and Tip Dialogs

Morae provides *balloon tips* (in Manager only) and *tip dialogs* (in Manager and Recorder). Both types of tips contain helpful information and recommendations related to the task you are trying to complete.

Balloon tips appear only the first couple of times you complete a particular task and then they automatically stop appearing. To reset the balloon tips, choose **Help** > **Reset Balloon Tips**.

Tip dialogs always appear unless you disable one or more of the dialogs manually. To disable all of the tip dialogs:

- Recorder – Choose **Tools > Preferences** and remove the checkmark from the Show all tips option.
- Manager – Choose **File > Preferences** and remove the checkmark from the Show all tips option.

You can disable an individual tip dialog by removing the checkmark from the *Show tip again* option in the lower left-hand corner of the dialog box.

Welcome to Morae Recorder

Install Morae Recorder on a computer to record a participant's experience, including audio comments, screen video, and/or camera video.

When recording the computer screen, Recorder also captures all system activity, including mouse clicks, web page changes, and other application information. Recorder automatically synchronizes the video and the data, creating a complete digital record of the user experience.

When recording from camera(s) only, you can log the session with Recorder. For more information on logging on the computer running Recorder, see **Log a Session**.

See also:

- **How to Use Morae Recorder**
- **Get to Know the Recorder Interface**
- **Study Configurations**
- **Recording Details**
- **Study Details**
- **Video and Audio Sources**
- **Recorder Preferences**

Rich Recording Technology

Using Rich Recording Technology (RRT), Recorder creates a complete chronicle of the events that occur behind the scenes in applications and the operating system, as well as the onscreen and keyboard activity of the user. This data is recorded in sync with video and audio of the user.

After importing recordings into Morae Manager, you can search the recording files for the items captured with RRT.

See also **How Rich Recording Technology (RRT) Works**.

How to Use Morae Recorder

Use Morae Recorder to set up study configurations and record sessions.

The general process of using Recorder is:

1. **Create or open a study configuration**.

   A study configuration defines a group of related recordings. Recordings in a study share the same **Study Details** including tasks, markers, and surveys.
2. Verify **Recording Details**.
3. **Start recording**.
4. Record session.
   - If you are recording from camera(s) only, you can **log** the session on the computer running Recorder.
   - If you are recording the screen, you can **log the session with a Wii Remote**.
5. **Stop recording**.
6. **Process** and save recordings.

See also:

- **Study Configurations**
- **Define Study Details**
- **Define Recording Details**
- **Video and Audio Sources**
- **Log a Session**

Get to Know the Recorder Interface

Use the following figure to become familiar with the main parts of the Recorder interface. To get started recording a session, see **How to Use Morae Recorder**.

1	**Recorder Toolbar** Quickly access common Recorder functions. For more information, see **Recorder Toolbar**.
2	**Record Button** Click to start a recording. Recorder provides flexible options to start Recorder depending on your equipment and participant setup. For more information, see **Recording Start Settings** and **Recording Stop Settings**.
3	**Recording Details** Preview the selected Recording Details. Click **Modify Recording Details** to define how to record sessions. For more information, see **Define Recording Details**.
4	**Video and Audio Sources** View and select the sources for the main video, Picture-in-Picture (PiP) video, and

	audio. For more information, see **Video and Audio Sources**.
	Audio Monitor View and adjust the audio level. For more information, see **Adjust Audio Level**.
	Study Details Study Details define the study including the study name, session instructions, tasks, markers, and surveys. For more information, see **Define Study Details**.
	Preview Window View the selected main and PiP video sources.
	Wii Remote Battery Display Shows if Wii Remote is attached and how much battery life is remaining. For more information on how to use the Wii Remote with Morae, see **Configure Wii Remote for Logging** and **Log with a Wii Remote**.

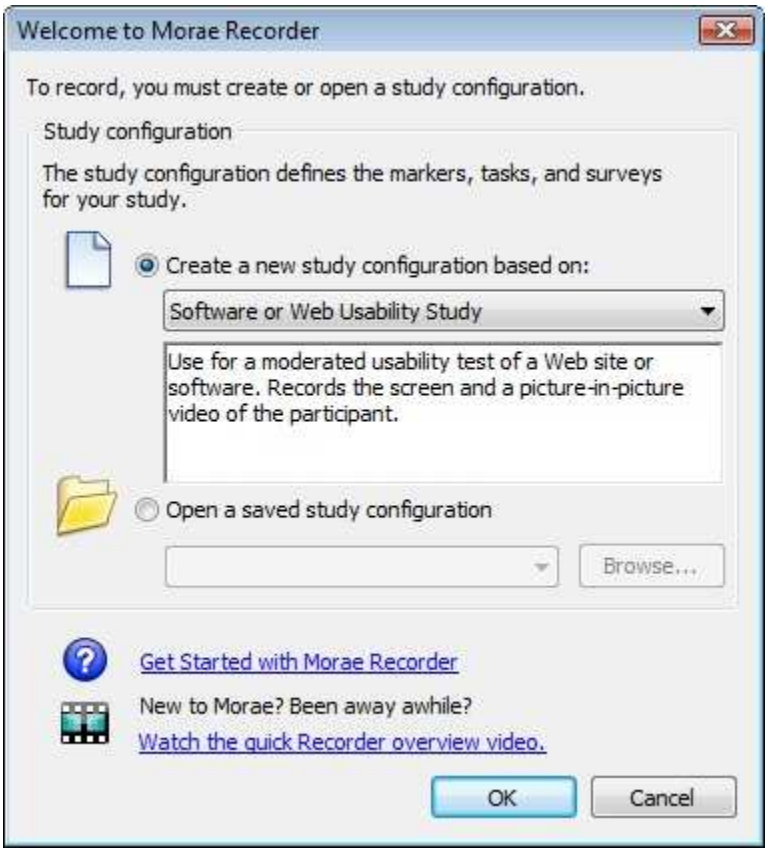
For more information on the different parts of the Recorder interface, see the following:

- **Welcome to Morae Recorder Dialog Box**
- **Recorder Toolbar**
- **Recording Details**
- **Study Details**
- **Video and Audio Sources**
- **How to Use Morae Recorder**

Welcome to Morae Recorder Dialog Box

File > New Study Configuration

The *Welcome to Morae Recorder* dialog box allows you to create or open a configuration.


Welcome to Morae Recorder
To record, you must create or open a study configuration.
Study configuration
The study configuration defines the markers, tasks, and surveys for your study.
Create a new study configuration based on:
Software or Web Usability Study
Use for a moderated usability test of a Web site or software. Records the screen and a picture-in-picture video of the participant.
Open a saved study configuration
Browse...
Get Started with Morae Recorder
New to Morae? Been away awhile?
Watch the quick Recorder overview video.
OK
Cancel

See also:

- **Get to Know the Recorder Interface**
- **Recorder Toolbar**
- **Create a Test Recording**
- **Recording Details**
- **Study Details**
- **Video and Audio Sources**
- **Recorder Preferences**
- **How to Use Morae Recorder**

Recorder Toolbar

Recorder Toolbar Button	Description
	Creates a new study configuration file. For more information, see **Study Configurations**.
	Opens a previously saved study configuration file.
	Saves the current study configuration in a file.
	Creates a 15 second test recording, allowing you to preview the audio and video to be captured. For more information, see **Create a Test Recording**.
	Opens the *Batch Process Recordings* dialog box. For more information see **Batch Process Recording Files.**
	Opens the Morae Learning Center web site in your default browser.
	Opens the Morae help system.

See also:

- **Get to Know the Recorder Interface**
- **Welcome to Morae Recorder Dialog Box**
- **Create a Test Recording**
- **Recording Details**
- **Study Details**
- **Video and Audio Sources**
- **Recorder Preferences**
- **How to Use Morae Recorder**

Create a Test Recording

Recorder's **Test Recording** option creates a recording that includes all of the data streams for the *Capture Options* defined in the study configuration. A message appears describing any problems with the current configuration so you can correct them prior to beginning an actual recording session.

When the 15-second test recording is complete, the screen video, camera video , Picture in Picture (PIP), and/or audio streams immediately play back. The test playback confirms if Recorder is accurately capturing the video and audio. This test also silently checks the other configuration settings chosen.

A Test Recording does not confirm *Recorder Start and Stop Option* settings**.**

If you are satisfied with the test recording and have not received any error messages, you can proceed to record with those settings.

To Run a Test Recording

1. Click the **Test Recording** button in the Recorder toolbar.
2. A dialog box appears asking if you want to continue with the test recording. Click **Yes**.
3. Recorder minimizes to a tray icon. The test recording begins immediately and proceeds for 15 seconds.

If you maximize Morae Recorder, you see a recording message appears in the *Camera Preview* pane and the status bar confirms a recording is being made.

4. During the test recording, create some sound and activity for Recorder to capture (i.e., speak into the microphone and actively interact with the computer).
5. At the end of the 15 seconds, the test video plays back and includes the screen video, camera video PIP and audio from the temporary test file.

   When the playback is complete, the window closes automatically. The test recording is not saved for later viewing.

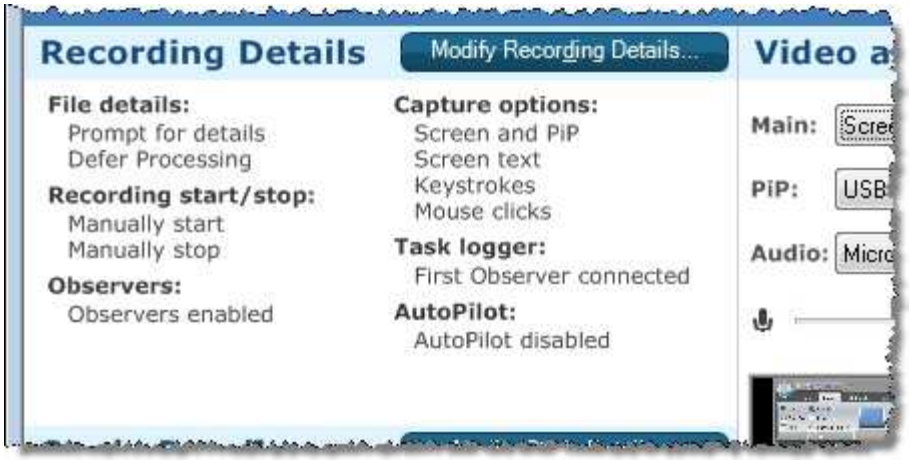
See also:

- **Get to Know the Recorder Interface**
- **Welcome to Morae Recorder Dialog Box**
- **Recorder Toolbar**
- **Recording Details**
- **Study Details**
- **Video and Audio Sources**
- **Recorder Preferences**
- **How to Use Morae Recorder**

Recording Details

Recording Details define how and what to record during a session. These settings can vary for recordings within a study.

When you save a study configuration, Recording Details are saved in the study configuration but you can change them for individual recordings, as needed. For example, if you need to run one session without capturing screen text, you can change that setting in Recording Details.



See also:

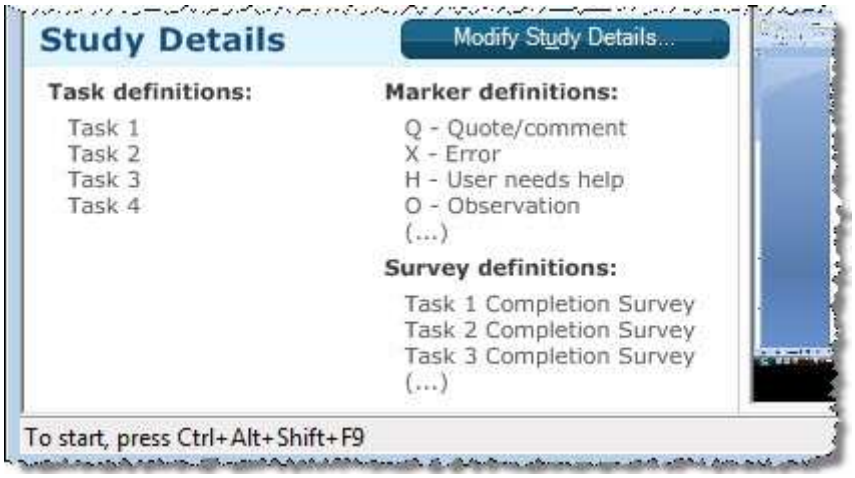
- **Define Recording Details**
- **Get to Know the Recorder Interface**
- **Welcome to Morae Recorder Dialog Box**
- **Recorder Toolbar**
- **Create a Test Recording**
- **Study Details**

- **Video and Audio Sources**
- **Recorder Preferences**
- **How to Use Morae Recorder**

Study Details

Study Details define the study information, including study name, tasks, markers, and surveys.

When you save a study configuration, Study Details are saved in the study configuration and must be the same for all recordings in a study.



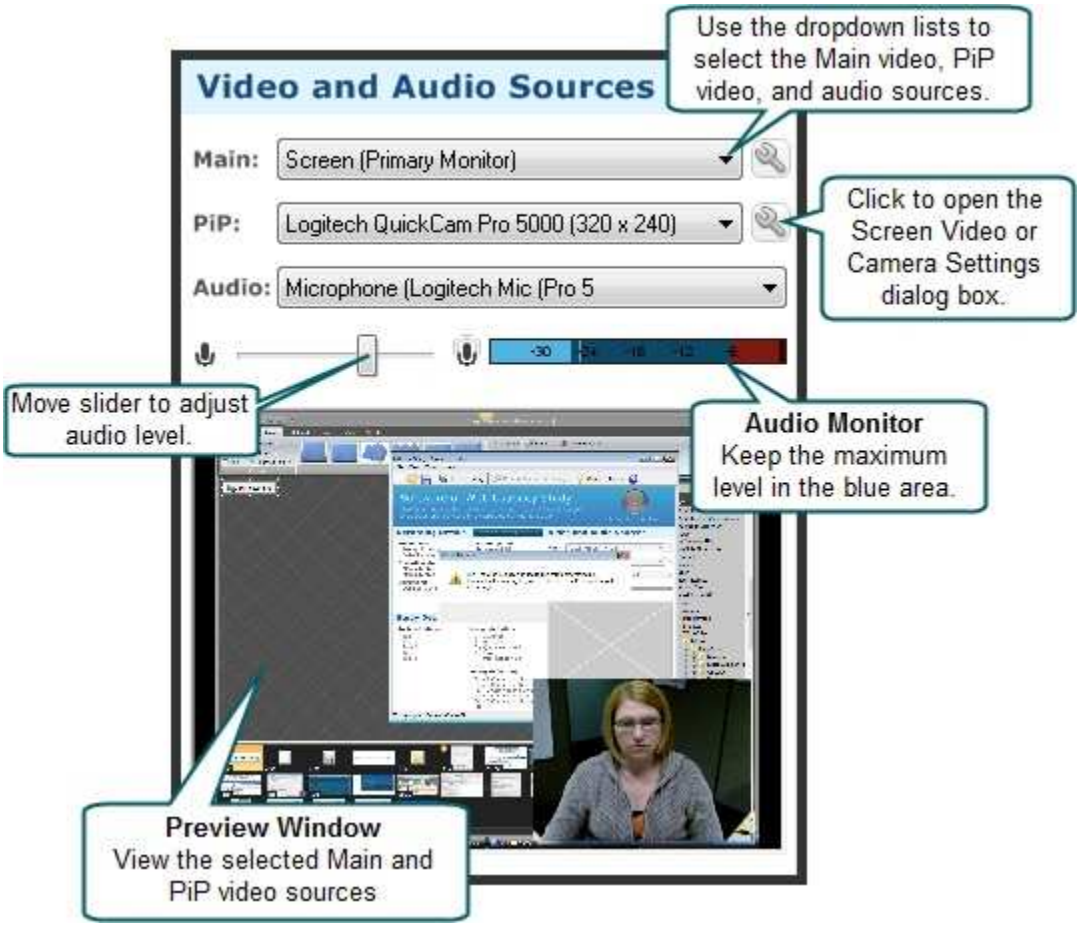
See also:

- **Define Study Details**
- **Get to Know the Recorder Interface**
- **Welcome to Morae Recorder Dialog Box**
- **Recorder Toolbar**
- **Create a Test Recording**
- **Recording Details**
- **Video and Audio Sources**
- **Recorder Preferences**
- **How to Use Morae Recorder**

Video and Audio Sources

Video and Audio Sources show the selected video and audio sources. There is also an audio monitor and video preview to help you set up your session.

Video and Audio Sources are affected by the hardware connected to the computer when Recorder is opened.


Video and Audio Sources
Use the dropdown lists to select the Main video, PiP video, and audio sources.
Main:
Screen (Primary Monitor)
PiP:
Logitech QuickCam Pro 5000 (320 x 240)
Audio:
Microphone (Logitech Mic (Pro 5
Click to open the Screen Video or Camera Settings dialog box.
Move slider to adjust audio level.
Audio Monitor
Keep the maximum level in the blue area.
Preview Window
View the selected Main and PiP video sources

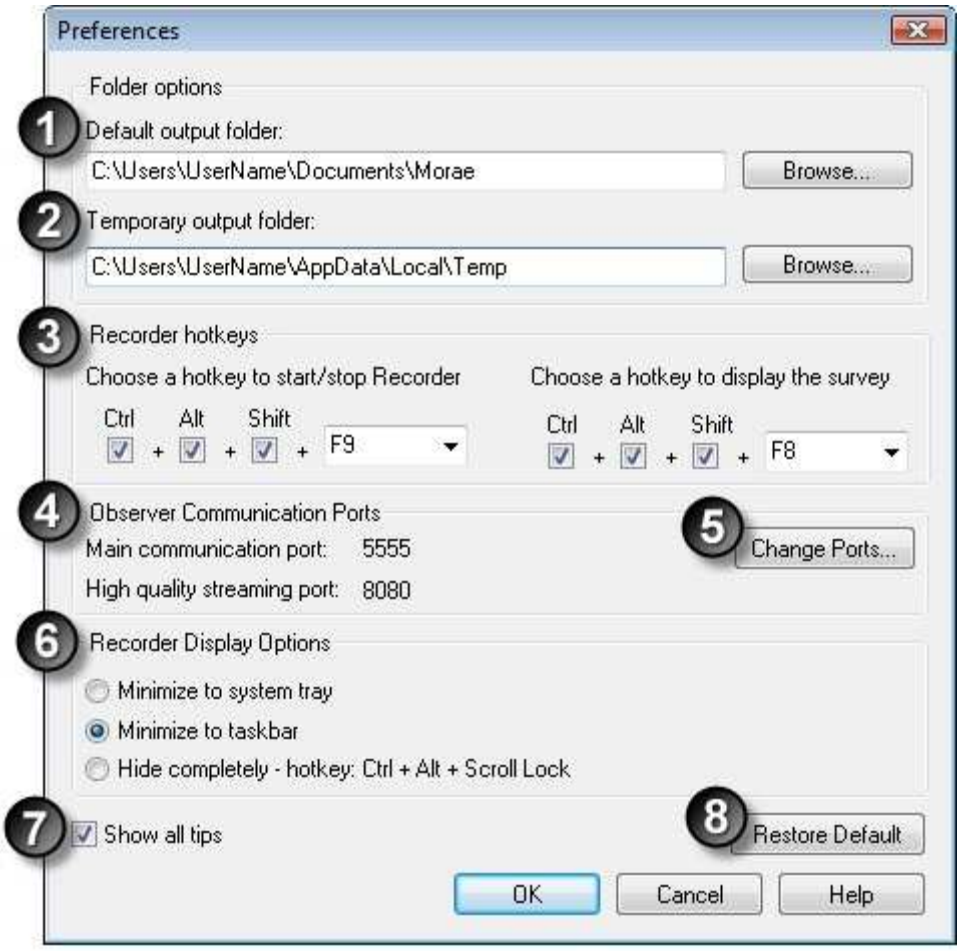
See also:

- **Video and Audio Sources**
- **Get to Know the Recorder Interface**
- **Welcome to Morae Recorder Dialog Box**
- **Recorder Toolbar**
- **Create a Test Recording**
- **Study Details**
- **Video and Audio Sources**
- **Recorder Preferences**
- **How to Use Morae Recorder**

Recorder Preferences

Preferences in Recorder are set in the *Preferences* dialog box. These settings are “global,” and apply to all recordings. The *Preferences* dialog box is located under *Tools* > Preferences.

Use the following figure to become familiar with the Recorder Preference options.



1	**Default output folder** Defines where to store recording files. This is a global setting for Recorder, all recording files are saved in this folder. By default, the folder is C:\\...My Documents\Morae folder on the Recorder source computer system.
2	**Temporary output folder** Defines the folder that temporarily holds Recorder output during recording. The temporary files are automatically deleted when the output file is written. We recommend using a local drive for temporary file storage. Choosing a temporary directory located on a network drive may cause performance problems.
3	**Recorder hotkeys** Defines the hotkey combination to start and stop Recorder and to deliver a survey to participants from the keyboard ▸ **Start/stop Recorder hotkey:** Choose any combination of **Ctrl**, **Alt**, **Shift** and any of the keys available in the dropdown menu to create a custom hotkey to start and stop Recorder. The default hotkey combination is <**Ctrl** + **Alt** + **Shift** + **F9>**. ▸ **Display survey hotkey:** Choose any combination of **Ctrl**, **Alt**, **Shift** and any of the keys available in the dropdown menu to create a custom hotkey to deliver a survey to participants. The default hotkey combination is <**Ctrl** + **Alt** + **Shift** + **F8>**. The F12 key cannot be selected alone as a hotkey.

4	**Observer Communication Ports** Shows the currently selected communication ports for communicating with Morae Observer. The port defined for Observer must match the main communication port defined here. If not, they will not be able to connect. See **Change the Communication Ports** for more information.
5	**Change Ports** Allows you to change your communication port if the default ports are not available in your network. If you change the main communication port, be sure to tell all observers. They have to enter this port number before they can connect to Recorder. See **Change the Communication Ports** for more information.
6	**Recorder Display Options** Morae provides several display options for Recorder during a session. ▸ **Minimize to System Tray** appears as a tray icon when a recording begins. Right-click on the tray icon to access a menu of Recorder control options (Start, Stop, Show Recorder and Exit Recorder). To make Recorder visible again, double-click on the tray icon . ▸ **Minimize to Taskbar** Recorder appears on the Windows taskbar while recording. ▸ **Hide completely:** Recorder is completely hidden. To show Recorder again, use the hotkey combination **<Ctrl + Alt + Scroll Lock>**.
7	**Show all tips** Enables the general program tip dialogs that appear throughout Recorder.
8	**Restore Default** Restores the **Default** and **Temporary** output folders and *Performance options* to their default settings.

See also:

- **Get to Know the Recorder Interface**
- **Welcome to Morae Recorder Dialog Box**
- **Recorder Toolbar**
- **Create a Test Recording**
- **Recording Details**
- **Study Details**
- **Video and Audio Sources**
- **How to Use Morae Recorder**

Change the Communication Ports

In some cases, Recorder and Observer cannot connect on the default communication ports of 5555 and 8080. In this case, the study configuration in Recorder and the communication port in Observer must be set to an alternative port number.

If you change the main communication port in Recorder, all observers must set the same port to connect. Make sure to give the port number to all potential observers. Observers do not need to know the high quality streaming port number.

To use alternative ports:

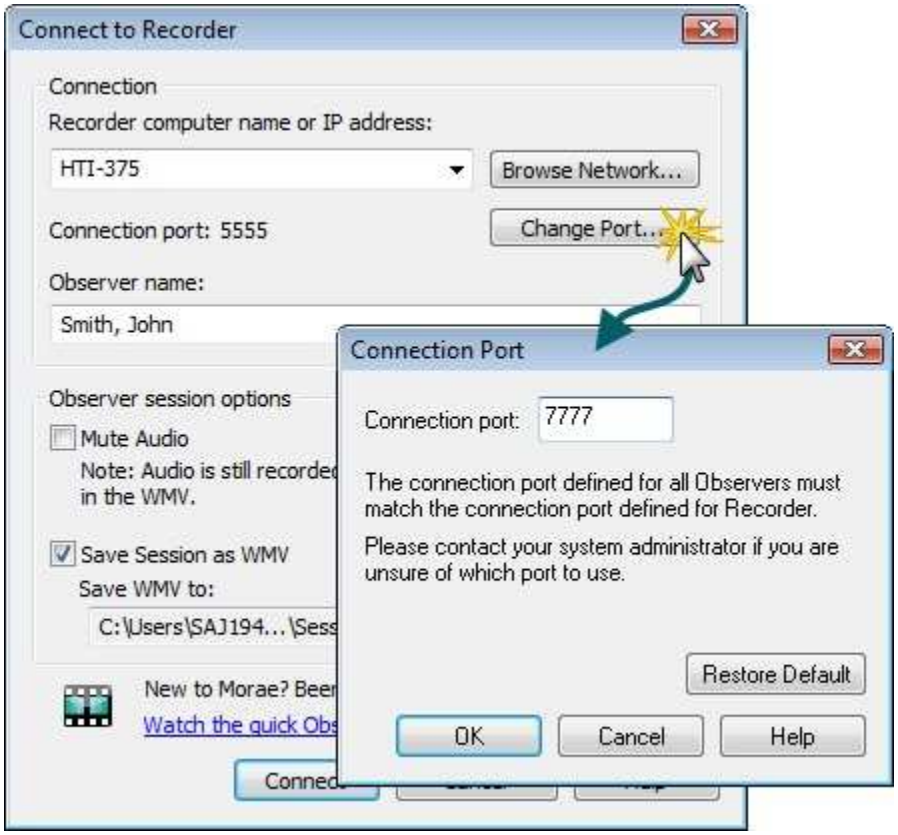
1. Contact your system administrator to determine which ports to use.
2. In Recorder, select **Tools > Preferences**.
3. When the *Preferences* dialog box opens, click **Change Ports**.
4. Enter the port numbers in the fields.

Change Ports
Change the ports only if the defaults will not work for your network. If you change the main communication port here, all Morae Observers must set their port to match or they will be unable to connect.
Please contact your system administrator if you are unsure of which ports to use.
Communication Ports
Main communication port:
7777
High quality streaming port:
9090
Restore Defaults
OK
Cancel
Help

Click **Restore Default** to return to the default communication ports.

5. Open Observer. In the *Connect to Recorder* dialog box, click **Change Port**. Enter the new main communication port number.

Observers do not need to enter the high quality streaming port. This is handled automatically by Recorder and Observer.



6. Click **OK** to apply the selected port and return to the *Connect to Recorder* dialog box.

Study Configurations

The ideas of the study and the study configuration are important to understand when working with Morae.

For information on working with study configurations, see **Template Study Configurations**, **Create a Study Configuration**, and **Modify a Study Configuration**.

What Is a Study?

A study involves recording, observing, and logging multiple user research sessions, analyzing the results, and sharing the results with stakeholders.

In Morae, recordings in a study share a common study configuration file (.mrcfg), which includes the Study Details*:* tasks, markers, and surveys.

Because the recordings in a study use the same configuration, you can compare and analyze the recordings in Manager. For example, when all the sessions use the same tasks, you can compare the time it took to complete a task across multiple participants. You can search for tasks, markers, events, and more across all recordings in a study.

To make sure that all recordings have the same Study Details, define and save a study configuration prior to recording any sessions.

If you need to combine recordings with different configurations into a single study, you can merge the recordings in Manager. You can also choose to have more than one study in a single Manager project file. See the Morae Manager Help for more information.

What is a Study Configuration?

A study configuration file (.mrcfg) defines study-specific information including Study Details and Recording Details.

Only recordings with the same study configuration can be searched and graphed together in Morae Manager.

Study Details must be the same for **all** recordings in a study and include:

- Study name, description, and instructions
- Tasks definitions and instructions
- Marker definitions and instructions
- Survey definitions and associations

Recording Details do not have to be the same for all recordings in a study and include:

- File saving and processing options
- Video sources
- What data to capture
- Who logs tasks
- How to start and end recordings

Template Study Configurations

Recorder includes template study configurations to help you define Study Details and Recording Details for different kinds of studies. Templates contain sample tasks, markers, and surveys, along with Recording Details pre-configured for different types of user research.

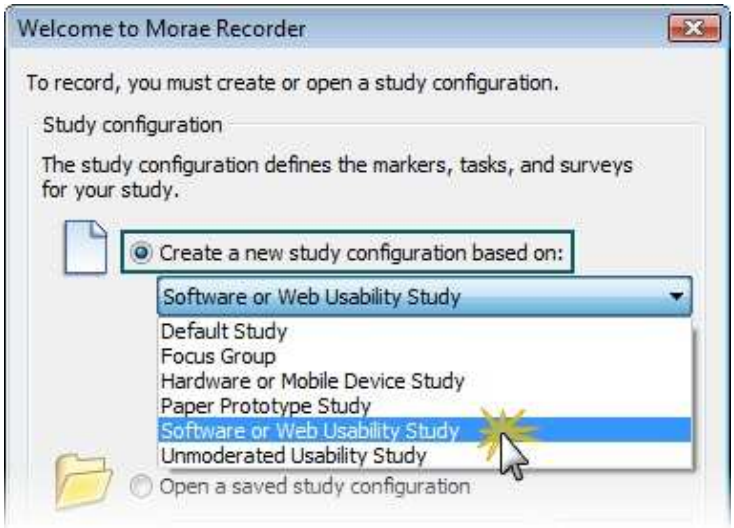
Template Study Configuration	Description
Default study configuration	Contains only basic task and marker settings. Records the screen and a PiP video of the participant.
Focus Groups	Record focus groups or in depth interviews. Use up to two cameras and log notes on the computer running Morae Recorder.
Hardware or Mobile Device Study	Test hardware device (cell phone, handheld, etc.) Point the primary camera at the hardware device, and the PiP camera at the participant.
Paper Prototype Study	Record low fidelity prototypes that can't be displayed on a computer. Point the primary camera at the paper prototype, and the PiP camera at the participant.
Software or Web Usability Study	Use for a moderated usability test of a Web site or software. Records the screen and a PiP video of the participant.
Unmoderated Usability Study	Use to conduct unmoderated tests. The participant interacts with onscreen study and task instructions, and tasks are automatically logged using AutoPilot.

See also:

- **Create a Study Configuration**
- **Modify a Study Configuration**

Create a Study Configuration

1. Open Recorder. The *Welcome to Morae Recorder* dialog box opens.
2. Select **Create a new study configuration based on**.
3. Select a template study configuration from the dropdown list.


Welcome to Morae Recorder
To record, you must create or open a study configuration.
Study configuration
The study configuration defines the markers, tasks, and surveys for your study.
Create a new study configuration based on:
Software or Web Usability Study
Default Study
Focus Group
Hardware or Mobile Device Study
Paper Prototype Study
Software or Web Usability Study
Unmoderated Usability Study
Open a saved study configuration

4. Click **OK**. The template study configuration opens in Recorder.
5. Click **Modify Study Details** to open the *Study Details* dialog box.

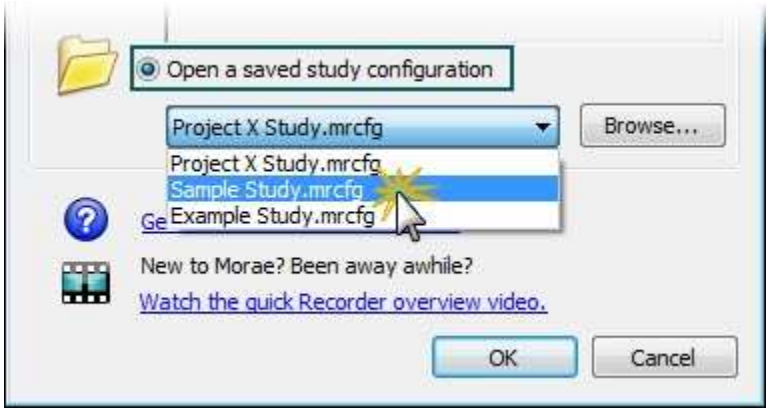
6. In the *Study Details* dialog box, **define the study details** and click **OK**.
7. Click **Modify Recording Details** to open the *Recording Details* dialog box.
8. In the *Recording Details* dialog box, **define the recording details** and click **OK**.
9. Choose **File > Save Study Configuration** to save the study configuration.

See also:

- **Template Study Configurations**
- **Modify a Study Configuration**

Modify a Study Configuration

1. Open Recorder. The *Welcome to Morae Recorder* dialog box opens.
2. Select **Open a saved study configuration**.
3. Select a recently used file from the dropdown list or click **Browse** to locate a file on your computer.



4. Click **OK**. The study configuration opens in Recorder.
5. Click **Modify Study Details** to open the *Study Details* dialog box.
6. In the *Study Details* dialog box, define the study details and click **OK**.

> If you modify study details, new recordings will not automatically match recordings previously made using this study configuration. You can merge these recordings later into a single study in Manager. For more information, see the Morae Manager Help.

7. Click **Modify Recording Details** to open the *Recording Details* dialog box.
8. In the *Recording Details* dialog box, define the recording details and click **OK**.
9. Choose **File > Save Study Configuration** to save the study configuration.

See also:

- **Template Study Configurations**
- **Create a Study Configuration**

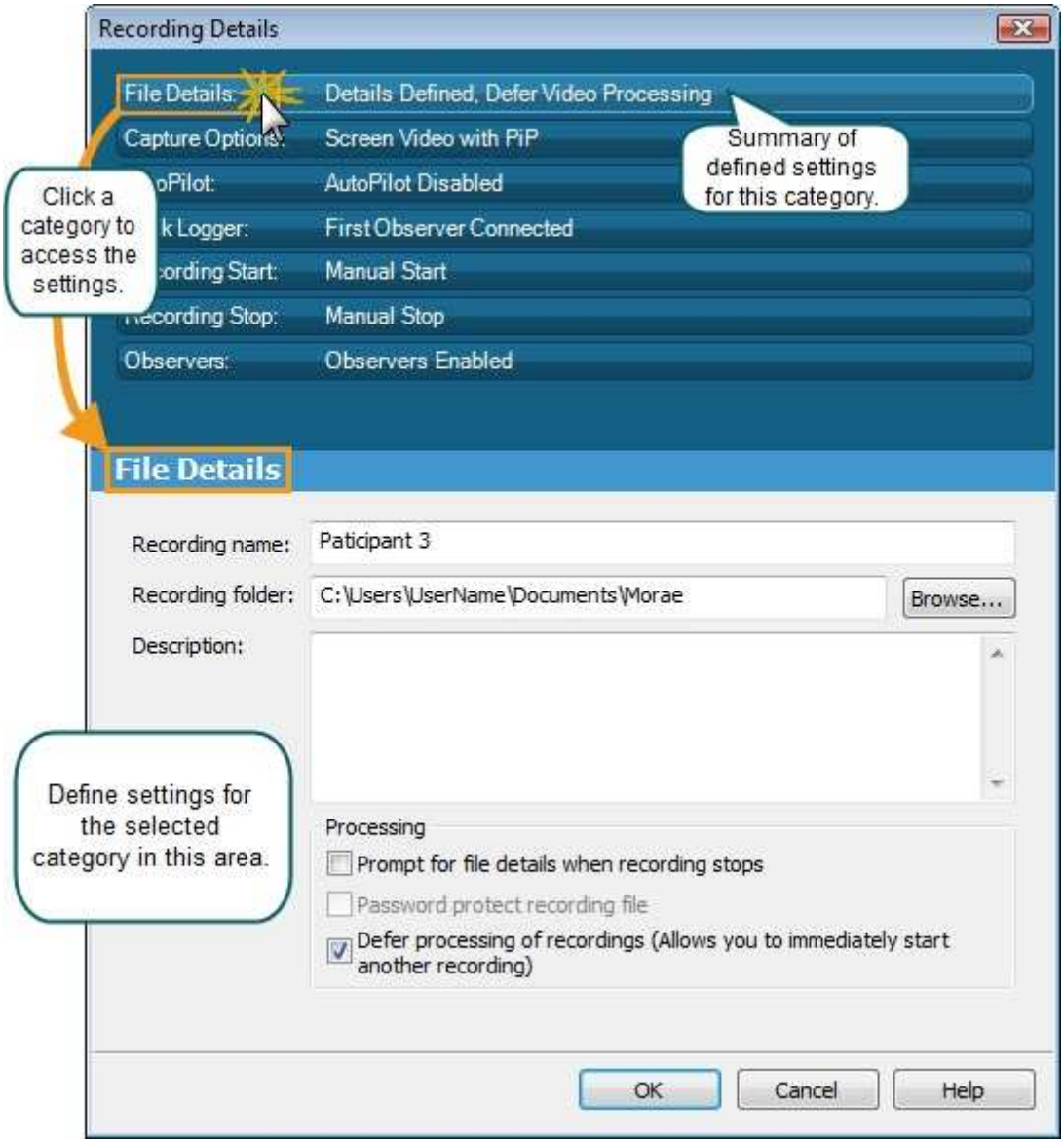
Define Recording Details

Recorder > Modify Recording Details button

Recording Details define *how* to record a session with Morae. In the *Recording Details* dialog box, define the following:

- **File Details**
- **Capture Options**
- **AutoPilot Settings**
- **Task Logger Settings**
- **AutoPilot Settings**
- **Recording Start Settings**
- **Recorder Stop Settings**
- **Observer Settings**

Recording Details apply to a specific test environment or participant set up. Recording Details do not have to be the same for all recordings in a study.



File Details

Recorder > Modify Recording Details button > File Details

The fields in the *Recording File Details* settings of the *Recording Details* dialog box define the **recording name, folder, and description**, along with the **file processing options**.

See also:

- **Capture Options**
- **AutoPilot Settings**
- **Task Logger Settings**
- **Recording Start Settings**
- **Recorder Stop Settings**
- **Observer Settings**

Recording Name, Recording Folder, and Description

Each recording (.rdg) needs a unique name. Define the file name, location and description for a recording in one of the following ways:

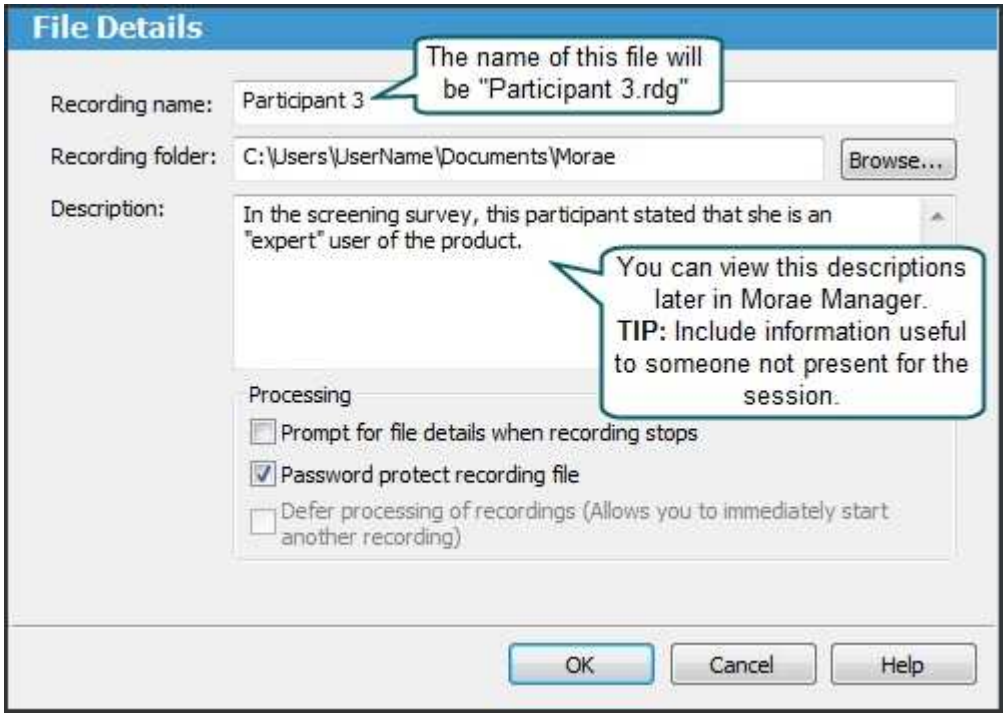
- **Before you record** in the *File Details* settings.
- **After you create a recording**, if you use the *Prompt for details when recording stops* option.

> You cannot save a recording without a name. You can lose the data from a recording if the test participant, or anyone else, closes the dialog prompting for these details after the recording stops.

For information on the processing options, see **Processing**.

Define File Details before Recording

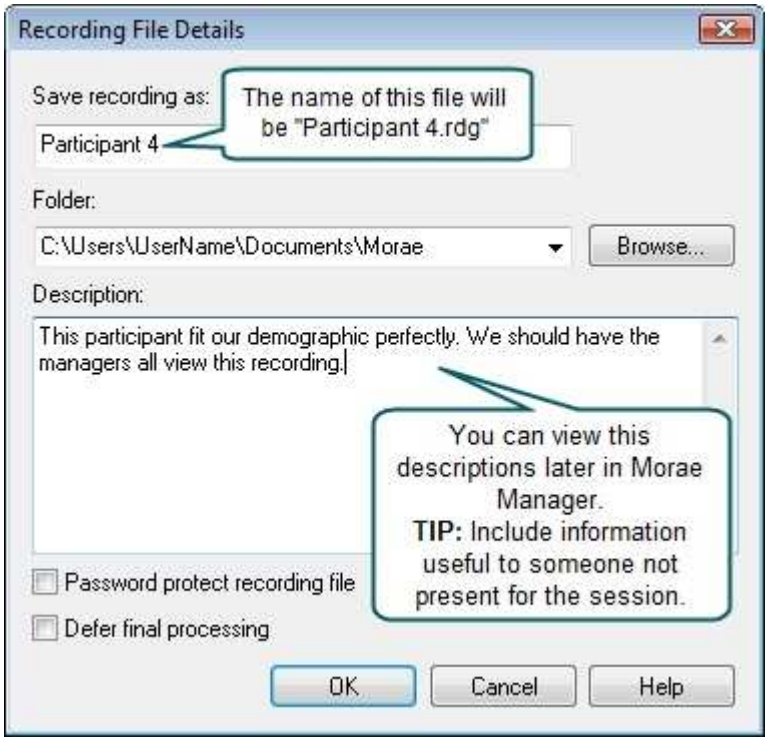
If you choose to define the File Details before you record, put information in these fields to name the recording file, define the folder to save the recording, and describe details about the recording (optional.)


File Details
Recording name:
Participant 3
The name of this file will be "Participant 3.rdg"
Recording folder:
C:\Users\UserName\Documents\Morae
Browse...
Description:
In the screening survey, this participant stated that she is an "expert" user of the product.
You can view this descriptions later in Morae Manager. TIP: Include information useful to someone not present for the session.
Processing
Prompt for file details when recording stops
Password protect recording file
Defer processing of recordings (Allows you to immediately start another recording)
OK
Cancel
Help

Define File Details after Recording

The recording is finished; the *Recording File Details* dialog box appears.

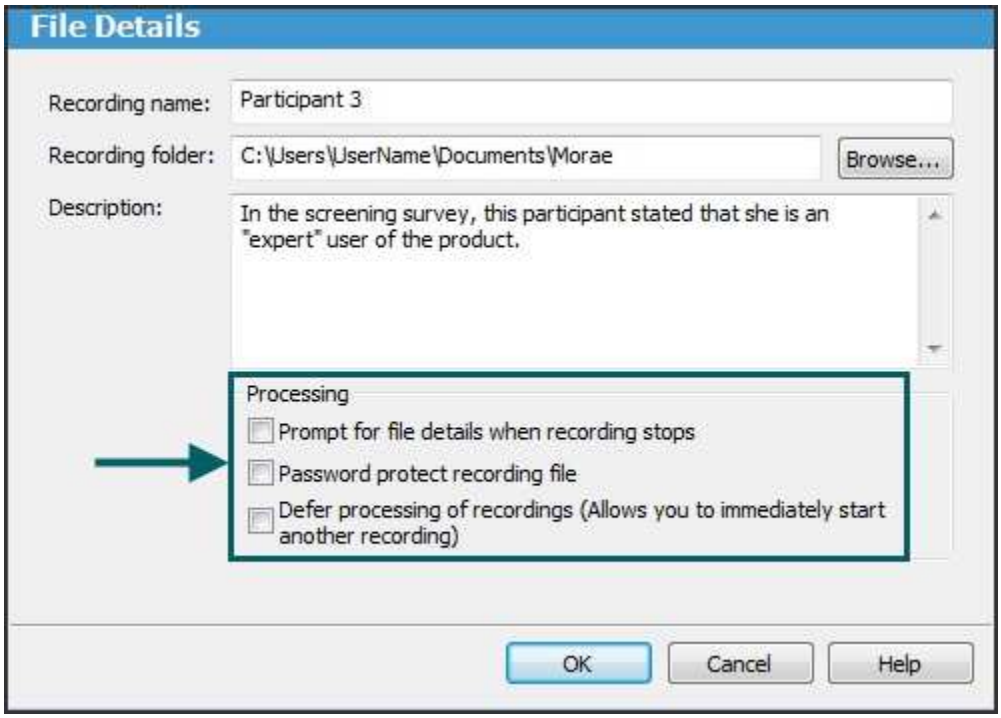
Put information in these fields to name the recording file, define the folder to save the recording, and describe details about the recording (optional.) You can also choose processing options in this dialog box.


Recording File Details
Save recording as:
The name of this file will be "Participant 4.rdg"
Participant 4
Folder:
C:\Users\UserName\Documents\Morae
Browse...
Description:
This participant fit our demographic perfectly. We should have the managers all view this recording.
You can view this descriptions later in Morae Manager.
TIP: Include information useful to someone not present for the session.
Password protect recording file
Defer final processing
OK
Cancel
Help

Processing

Choose one of these options for processing recordings:

- **Prompt for File Details When Recording Stops**
- **Password Protect Recording Files**
- **Defer Processing of Recordings** (You can start the next recording immediately.)



See also: **Recording Name, Recording Folder, and Description**.

Prompt for File Details When Recording Stops

You cannot save a recording without a name. You can lose the data from a recording if the test participant, or anyone else, closes the dialog prompting for these details after the recording stops.

Enable the *Prompt for file details when recording stops* checkbox if you do not want to define the file name, folder, and description prior to recording. At the end of recording, Recorder prompts you to **Define File Details after Recording**.

See also:

- **Password Protect Recording Files**
- **Defer Processing of Recordings**

Password Protect Recording Files

Enable the *Password protect recording file* checkbox to “lock” the recording files if your recordings include sensitive material.

You can define the password before the recording starts or after it ends.

Remember your password. After you assign a password, you cannot open the recording in Manager without the password. TechSmith cannot retrieve your password or open the recording file, if you forget your password.

Password Protect a Recording File before Recording

1. Enable the *Password protect recording file* checkbox and click **OK**.
2. When the recording starts, Recorder prompts you to select and verify a password.

Password Protect a Recording File after Recording

1. Enable the Prompt for details when recording stops checkbox and click **OK**.
2. When the recording stops and the *Recording File Details* dialog box opens, enable the *Password protect recording file* checkbox.
3. The *Enter Recording File Password* dialog box opens and prompts you to enter and confirm a password.

Passwords are case sensitive and can include letters, numbers and symbols in any combination. There is no maximum length for passwords.

See also:

- **Prompt for File Details When Recording Stops**
- **Defer Processing of Recordings**

Defer Processing of Recordings

If you defer the final processing, your data is not at an increased risk of being lost or damaged if a crash occurs. Recorded data is written to disk immediately during recording whether you choose to defer final processing or not. Final processing involves compressing the files into an archive.

By default, Recorder writes out and verifies each recording (.rdg) file immediately after a recording is completed. Depending on the length and content of the recording, this processing can take some time.

Enable the *Defer processing of recordings* checkbox to defer recording processing, which allows you to start another recording immediately and save recordings in the Batch Processing Queue to later process several recordings at one time.

Use the *Defer processing of recordings* option with the *Automatically restart Recorder* option to automatically run repeated recordings or conduct several recordings without waiting for file processing in between.

See also:

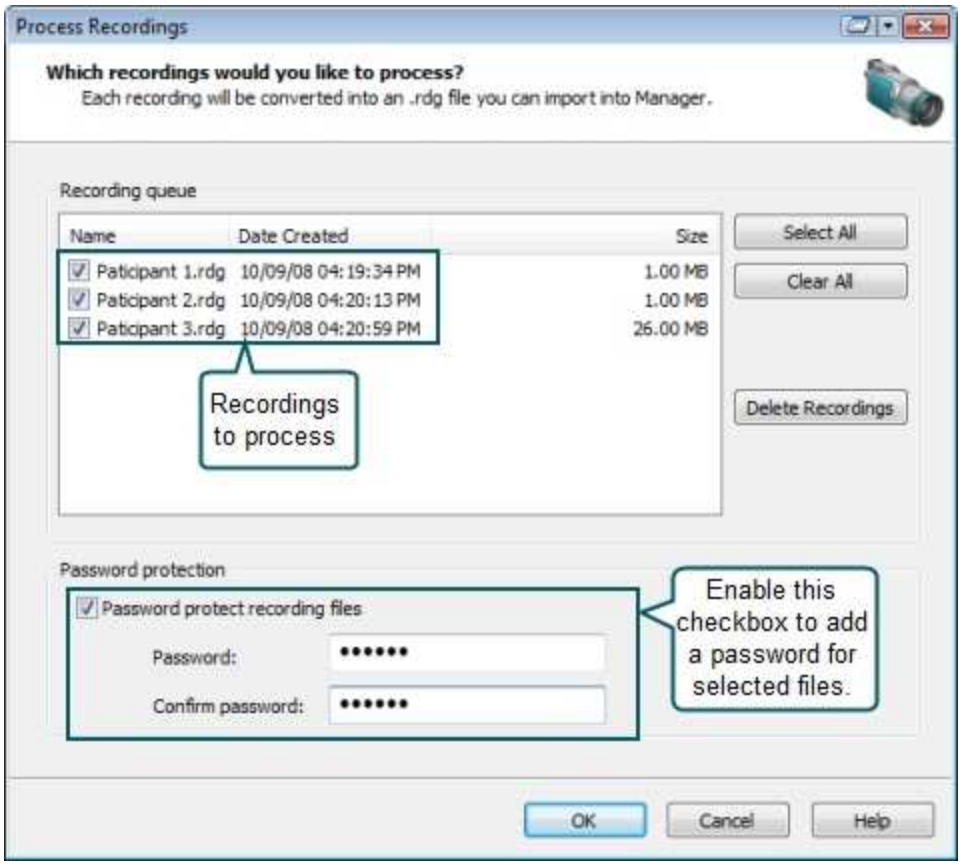
- **Prompt for File Details When Recording Stops**
- **Password Protect Recording Files**

Batch Process Recording Files

When you complete a series of recordings and are ready to process them:

1. Click **Process Deferred Recordings** or **File > Process Deferred Recordings**. The *Batch Process Recordings* dialog appears.
2. Select the recording files to process in *Recording queue*.

   The recording files that you do not select remain in the list.



3. Click **OK** to process the selected recordings.

When processing is complete, the *Batch Processing Results* dialog appears. This dialog gives summary information about each recording file, including whether it was successfully processed and where it is saved.

Capture Options

Recorder > Modify Recording Details button > Capture Options

In *Capture Options*, define the **main video source, Picture-in-Picture option**, **mouse video effects**, and **the data to capture during recording**.

The fields in the *Capture Options* of the *Recording Details* dialog box define the data you want Recorder to include in the recording. Use this data later in Manager for analysis and graphs.

See also:

- **File Details**
- **AutoPilot Settings**
- **Task Logger Settings**
- **Recording Start Settings**
- **Recorder Stop Settings**
- **Observer Settings**

Main Video Source and Picture-in-Picture

Define if you are recording the computer screen or camera video as the main video source for your recording and if you want to include a Picture-in-Picture (PiP) video.

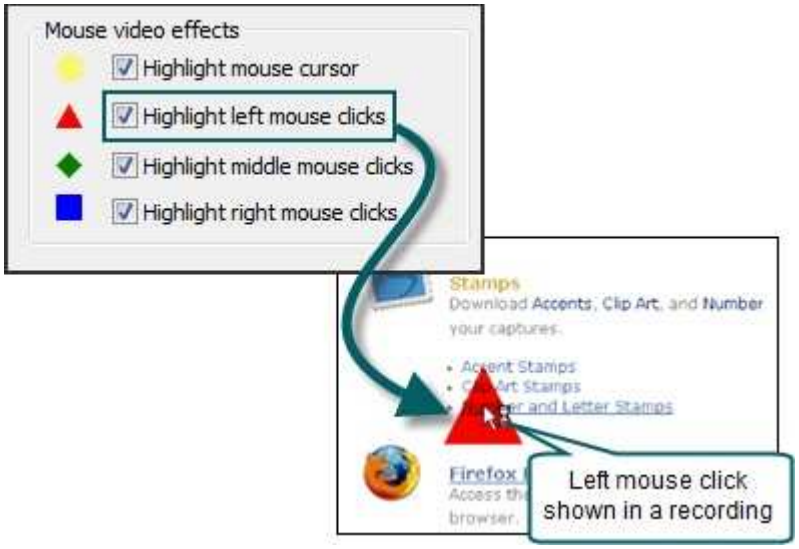
These options are also available on the main interface in **Video and Audio Sources**. If you change the main video source or PiP options in the *Recording Details* dialog box, options selected in *Video and Audio Sources* update automatically.

See also:

- **Mouse Video Effects**
- **Data**

Mouse Video Effects

Define which, if any, mouse video effects to include in the recordings. Mouse video effects help clarify mouse when you analyze recordings in Manager.



The mouse video effects do not appear on the participant's screen or in the Observer during recording. The effects appear when you import the recording in Manager.

See also:

- **Main Video Source and Picture-in-Picture**
- **Data**

Data

Define which kinds of data you record. Choose to capture or exclude:

- Mouse clicks
- Keystrokes
- Screen text

By default, Recorder captures all of this data. If you are dealing with sensitive or proprietary information, you may need to exclude some data from capture. For example, if the test deals with user names and passwords, you can choose to exclude keystrokes. By excluding keystrokes, the recording will not capture the password.

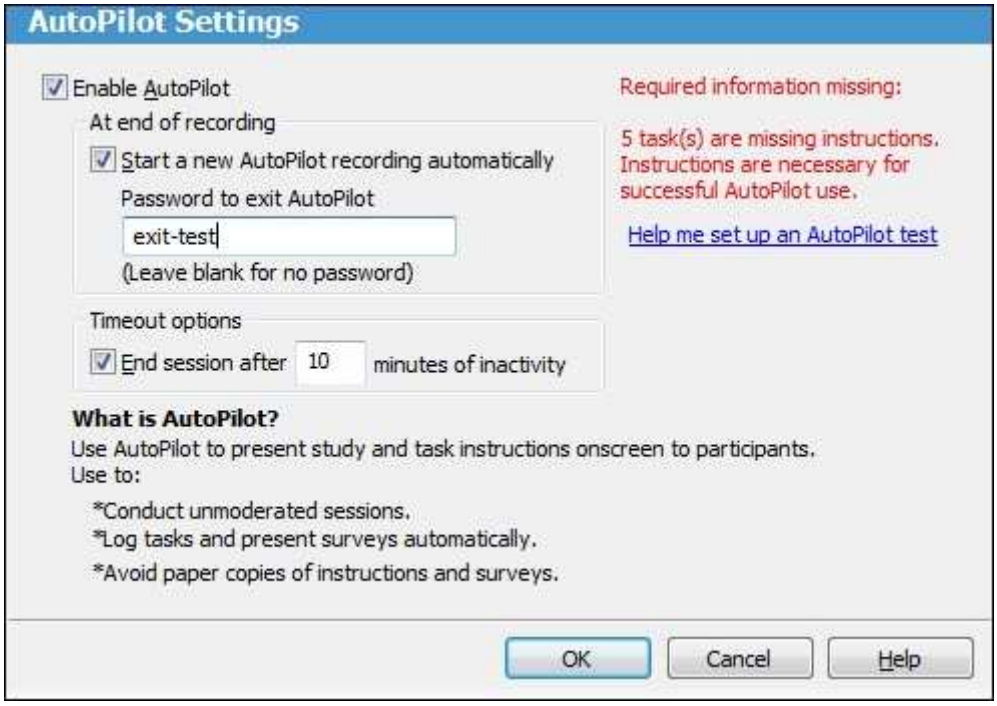
See also:

- **Main Video Source and Picture-in-Picture**
- **Mouse Video Effects**

AutoPilot Settings

Recorder > Modify Recording Details button > AutoPilot

The checkboxes in the *AutoPilot Settings* of the *Recording Details* dialog box define if and how you want to use AutoPilot.


AutoPilot Settings
Enable AutoPilot
At end of recording
Start a new AutoPilot recording automatically
Password to exit AutoPilot
exit-test
(Leave blank for no password)
Timeout options
End session after 10 minutes of inactivity
Required information missing:
5 task(s) are missing instructions. Instructions are necessary for successful AutoPilot use.
Help me set up an AutoPilot test
What is AutoPilot?
Use AutoPilot to present study and task instructions onscreen to participants.
Use to:
*Conduct unmoderated sessions.
*Log tasks and present surveys automatically.
*Avoid paper copies of instructions and surveys.
OK
Cancel
Help

At End of Recording

Enable the **Start a new AutoPilot recording automatically** checkbox to set up AutoPilot for a new recording as soon as one recording ends.

To make sure that a participant cannot get to the Recorder interface, select a password to exit an AutoPilot test. Click **Exit Session** on the AutoPilot test *Start* screen to return to Recorder.

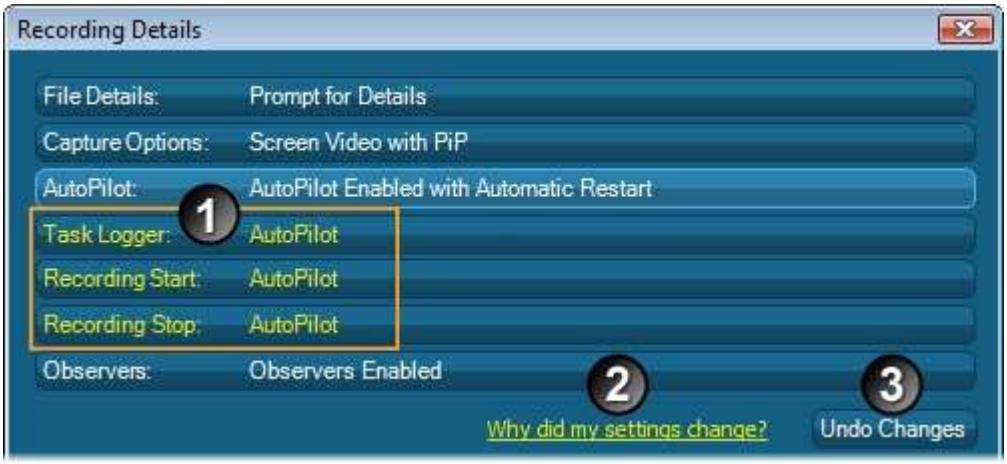
Timeout Options

If you use AutoPilot to run an unmoderated test, someone may not finish a session. Enable the checkbox and enter the amount of time you want AutoPilot to wait until ending the session.

Enable AutoPilot

Enable this checkbox to turn on AutoPilot.

1	When you enable AutoPilot, other Recording Details update to to provide the recommended configuration. These updated settings appear in yellow.
2	Click **Why did my settings change?** to see which settings changed and why.
3	Click **Undo Changes** to return to the previous settings.



See also:

- **AutoPilot**
- **File Details**
- **Capture Options**
- **Task Logger Settings**
- **Recording Start Settings**
- **Recorder Stop Settings**
- **Observer Settings**

Task Logger Settings

Recorder > Modify Recording Details button > Task Logger

The task logger is the one observer who can log tasks for each recording. The task logger can also be the recording computer for screen and video recordings if a Wii Remote is used to log tasks. Only the task logger can mark the start and end of tasks.

You can also choose to let any observers or only the task logger send surveys.

See also:

- **Who Should Be The Task Logger?**
- **Designate the Task Logger**
- **Designate Who Sends Surveys**
- **File Details**
- **Capture Options**

- **AutoPilot Settings**
- **Recording Start Settings**
- **Recorder Stop Settings**
- **Observer Settings**

Who Should Be The Task Logger?

Recorder > Modify Recording Details button > Task Logger

When defining the task logger, choose one of the following options.

- **First Observer connected**

  Use this option if you only have one Observer or everyone connecting to the session could log tasks.

  If the task logger disconnects Observer from the session, intentionally or not, the next Observer who connects automatically becomes the task logger.

- **Designated Observer**

  Use this option if you know exactly who you want to log the tasks.

  If the designated task logger disconnects Observer from the session, whether intentionally or not, no one else can log tasks. If the task logger re-connects, he or she can again log tasks. See **Designate the Task Logger**.

  The task logger name must match the name entered in Observer. For example, if you enter only a first name in the Recoding Details and the Observer enters a first and last name, they will not be designated as task logger.

- **AutoPilot**

  Use this option with AutoPilot. As the participant clicks **Start Task** and **End Task** in AutoPilot, it logs the corresponding markers in the recording.

  When you enable AutoPilot, the Recording Details update to set AutoPilot to log tasks.

- **Recording computer (Local Logger)**

  This option only available when the main video source is set to Video.

  Use this option if you record camera as the Main video source and want to log the session on the same computer you are recording on. You do not need to have any Observers connected to log a camera video-based session. If desired, you can also **log the test using a Wii Remote**.

- **Recording computer (Wii Remote)**

  This option only available when the main video source is set to Screen.

  Use this option if you record screen as the Main video source and want to **log the test using a Wii Remote**. This setting allows you to log on the same computer you are recording on. You do not need to have any Observers connected to log a camera video-based session; you can log tasks and markers with the Wii Remote alone.

See also:

- **Task Logger Settings**
- **Designate the Task Logger**

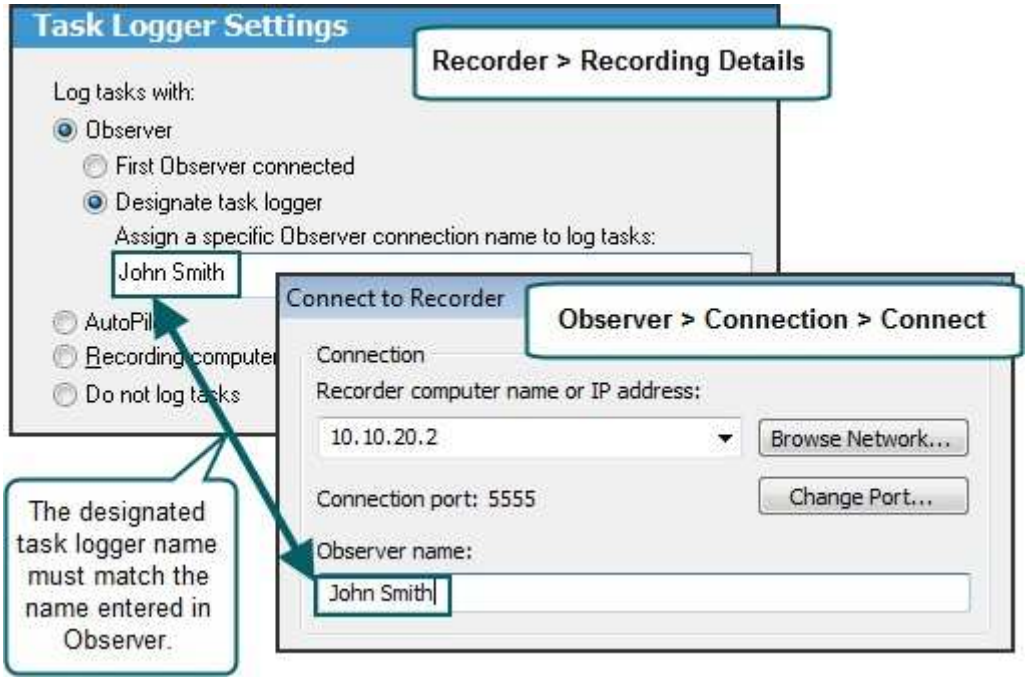
Designate the Task Logger

Recorder > Modify Recording Details button > Task Logger

To designate a specific task logger by name:

1. Select the *Observer* option.
2. Select *Designate the task logger*.
3. Enter the name of the task logger.
4. Click **OK**.

When the task logger connects to Recorder, the Observer name must match the name designated in Recorder.



See also:

- **Task Logger Settings**
- **Who Should Be The Task Logger?**

Designate Who Sends Surveys

You may want to allow only the task logger to send surveys to the recording computer. Select Task logger only to make sure that post-task surveys are sent only after the task is complete.

To designate who can send surveys:

- Enable **Any Observer** to allow all observers to send surveys during a session
- Enable **Task logger only** to allow only the task logger to send surveys during a session.

Recording Start Settings

Recorder > Modify Recording Details button > Recording Start

Recorder provides flexible options to start Recorder depending on your equipment and participant set up.

The following table describes the available options to start a recording.

Start Option	Description	Start Button
Manually	Recording starts when you click the **Start** button or use the hotkey combination <**Ctrl** + **Alt** + **Shift** + **F9**>.	
Based on an event	Recording starts when a certain event occurs. Choose one of the event types from the dropdown menu: ▸ **Mouse Click** –Recording starts at the click of the mouse. ▸ **Application Launch** – Recording starts when the specified application launches, for example when the participant launches Internet Explorer. ▸ **Application Exit** – Recording starts when the participant exits a specified application. ▸ **In an application** - Click the **Browse** button to find the application's executable name (for example IEXPLORE.EXE).	 Mouse click Application Launch Application Exit
At a specific Date/Time	Recording starts at a particular date and time. Leave the box next to the Date field unchecked if you want the recording to start at that time on any date. ▸ Recorder must be running at the time the recording is set to begin. ▸ A time-based start only occurs one time. After the recording is complete, you must click **Start** again to set Recorder to wait for the next time-based start. ▸ A time-based start can be set up to 49 days in advance of the recording. ▸ If the time has already passed for today, the recording starts at the specified time tomorrow.	

Using Observer	Recording starts when an Observer clicks **Start the recording** button on Observer's toolbar. Click the **Start** button in Recorder to wait for the start signal from Observer. If you leave the Observer name field blank, any Observer can start Recorder. You need to return to the Recorder computer between recordings to click **Start**. To avoid this additional interaction with Recorder, see **Automatically Restart Recorder.**	
AutoPilot	Click the **Start** button to launch the AutoPilot interface. Recording starts when the participant clicks **Start** after reading the study instructions in AutoPilot.	 Recorder Start AutoPilot Start

See also:

- **File Details**
- **Capture Options**
- **AutoPilot Settings**
- **Task Logger Settings**
- **Recorder Stop Settings**
- **Observer Settings**

Automatically Restart Recorder

Enable the *Automatically restart Recorder* checkbox to automatically restart Recorder after each recording, using the same recording settings.

The Automatically restart Recorder option does not work if you use the following Start and Stop options:
- Manual start
- Time based start with a date specified
- Time based stop with a date specified
- Event based start on a mouse click

To automatically restart Recorder:

1. In Recorder, click the **Modify Recorder Details** button. The *Recording Details* dialog box appears.
2. Click **Recording Start** and select the *Recorder Start Setting*.
3. Enable the *Automatically restart Recorder* checkbox.
4. Click **File Details**.
5. Disable the *Prompt for details when recording stops* checkbox.
   This prevents the *Recording file details* dialog from appearing after each recording.
6. Enable the *Defer processing of recordings* checkbox.
   This places the recording files in a queue for later processing.

When you are finished with a series of automated recordings, go back to Recorder and batch process the recording files (**File** > **Process Deferred Recordings**). For more information, see **Batch Process Recording Files** .

Recorder sequentially numbers the recording files by adding a number to the file name entered in the **Recording Folder field**.
For example, if you entered “Test” in the Recording name field, the recording names are “test.rdg”, “test-0001.rdg” and “test-0002.rdg”, etc.

Recorder Stop Settings

Recorder > Modify Recording Details button > Recording Stop

Morae provides several options to choose how and when recordings stop. Stop recordings manually or use one of the automated stop options.

The following table describes the available options to stop a recording.

Stop Recorder Option	Description	Stop Button
Manually	Recording stops when you click the Stop button, use the hotkey combination <**Ctrl** + **Alt** + **Shift** + **F9>,** or right-click the tray icon and choose **Stop** from the menu. You can always stop Recorder manually, even if you selected another stop option.	
Based on an event	Recording stops when a certain event occurs. Choose one of the event types from the dropdown menu: ▸ **Application Launch** – Recording stops when the specified application launches, for example when the participant launches Internet Explorer. ▸ **Application Exit** – Recording stops when the participant exits a specified application. ▸ **In an application** - Click the **Browse** button to find the application’s executable name (for example IEXPLORE.EXE).	 Application Launch Application Exit
Time based	Recording stops at a particular date and time. ▸ Leave the date field disabled to stop the recording at the specified time today. ▸ If this time has already passed for today, the recording stops at the specified time tomorrow. ▸ A time-based stop only occurs one time. After that recording is complete, you must click the Start button again to set Recorder to wait for the next time-based start. ▸ A time-based stop can be set up to 49 days in advance of the recording.	
After	Recording stops after number of hours entered. The dropdown list only shows durations up to 2.0 hours, you can type in up to 1176 hours (49 days).	

Using Observer	Recording stops when an Observer clicks **Stop the recording** button on Observer's toolbar. If you leave the Observer name field blank, any Observer can stop Recorder. You need to return to the Recorder computer between recordings to click **Start**. To avoid this additional interaction with Recorder, see **Automatically Restart Recorder.** If you automatically restart, you click **Start** in Recorder once and then the Observer user who has control of Recorder can start and stop recordings repeatedly, without returning to the Recorder computer.	
AutoPilot	Recording ends when: ▸ You click **Stop** in Recorder. ▸ A participant clicks **OK** in AutoPilot after completing the session tasks and surveys. ▸ A participant clicks **Exit Session** in AutoPilot to leave a session at any time. Enable the *Start a new AutoPilot recording automatically* checkbox to set up AutoPilot for a new recording as soon as one recording ends. See **AutoPilot Settings**.	 Recorder stop AutoPilot stop Leave AutoPilot

See also:

- **File Details**
- **Capture Options**
- **AutoPilot Settings**
- **Task Logger Settings**
- **Recording Start Settings**
- **Observer Settings**

Observer Settings

Recorder > Modify Recording Details > Observers

With Morae, you can allow one or multiple computers to connect over a network to a computer running Recorder. All observers can view the recording and log markers during a session. This flexibility allows your entire team to observe the screen and camera video and hear the audio of the user, streaming from the Recorder computer.

To allow Observers to connect to Recorder:

1. Enable the *Allow Observer* checkbox.
2. Enter the amount of time Recorder waits for pending (unfinished) tasks and markers before ending the recording. By default, Recorder waits 60 seconds.
3. Click **OK**.

See also:

- **File Details**
- **Capture Options**
- **AutoPilot Settings**
- **Task Logger Settings**
- **Recording Start Settings**
- **Recorder Stop Settings**

Define Study Details

Recorder > Modify Study Details

Study Details define the study including the study name, session instructions, tasks, markers, and surveys. In the *Study Details* dialog box, define the following:

- **Study name, description, and instructions**
- **Tasks definitions and instructions**
- **Marker definitions and instructions**
- **Survey definitions and associations**

The study-specific information defined in the *Study Details* dialog box should be the same for all recordings in a study.

If you modify study details, new recordings will not automatically match recordings previously made using this study configuration. You can merge these recordings later into a single study in Manager. For more information, see the Morae Manager Help.

See also:

- **Configure Wii Remote for Logging**
- **To Define a Task**
- **To Define a Marker**
- **Create a Survey Using Custom Questions**
- **Create a Survey Using System Usability Scale Questions**

Define the Study Description

Modify Study Details > Description tab File > New or Open > Study Configuration > Modify Study Details > Description tab

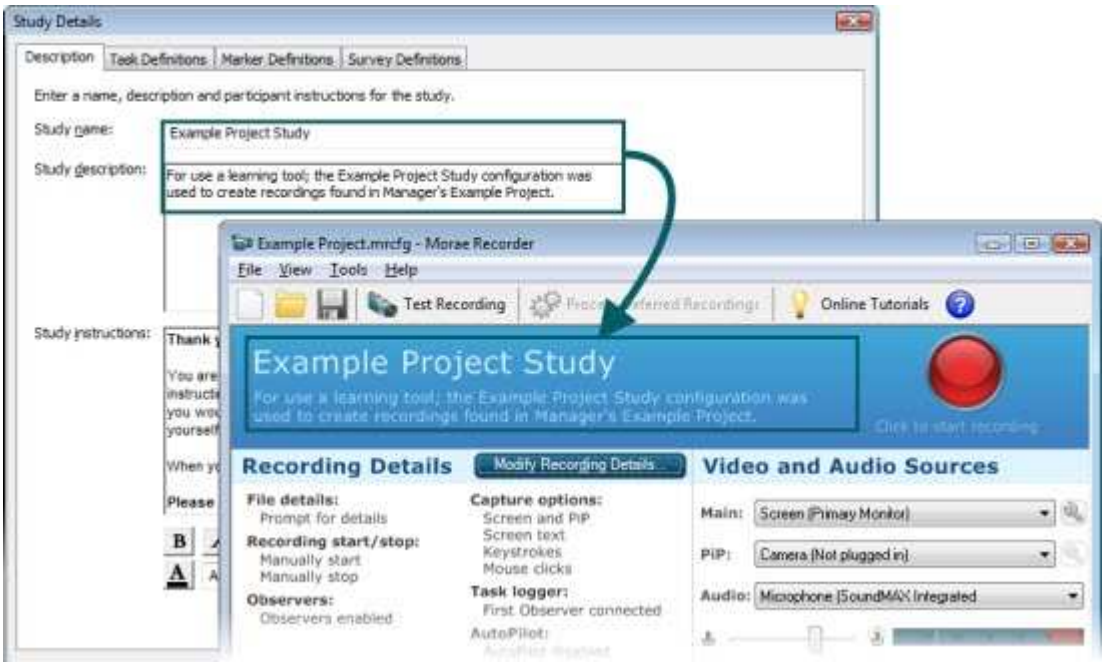
The fields in the *Description* tab of the *Study Details* dialog box define the **study name**, **description**, and **instructions**.

You can open the configuration in the Morae Add-In for Microsoft Office Word and drop the study details into a Word file to create handouts for participants. See **Create Session Handouts** for more information.

Study Name and Study Description

The name and description appear in Recorder and are available when you import recordings into Manager.

Put information in these fields to describe why and when you would want to use this configuration. It will help you to choose the correct study configuration for a session.



Study Instructions

The study name and instructions appear on the computer running AutoPilot. They are presented to the participant before they begin a session. You can also pull these instructions into Microsoft Word to **create handouts** if you are not using AutoPilot to run your session.

Put information in this field to describe the scenario or any special instructions for the participant.

See also:

- **Define the Study Tasks**
- **Define the Study Markers**
- **Define the Study Surveys**

Define the Study Tasks

Recorder > Modify Study Details > Task Definitions tab

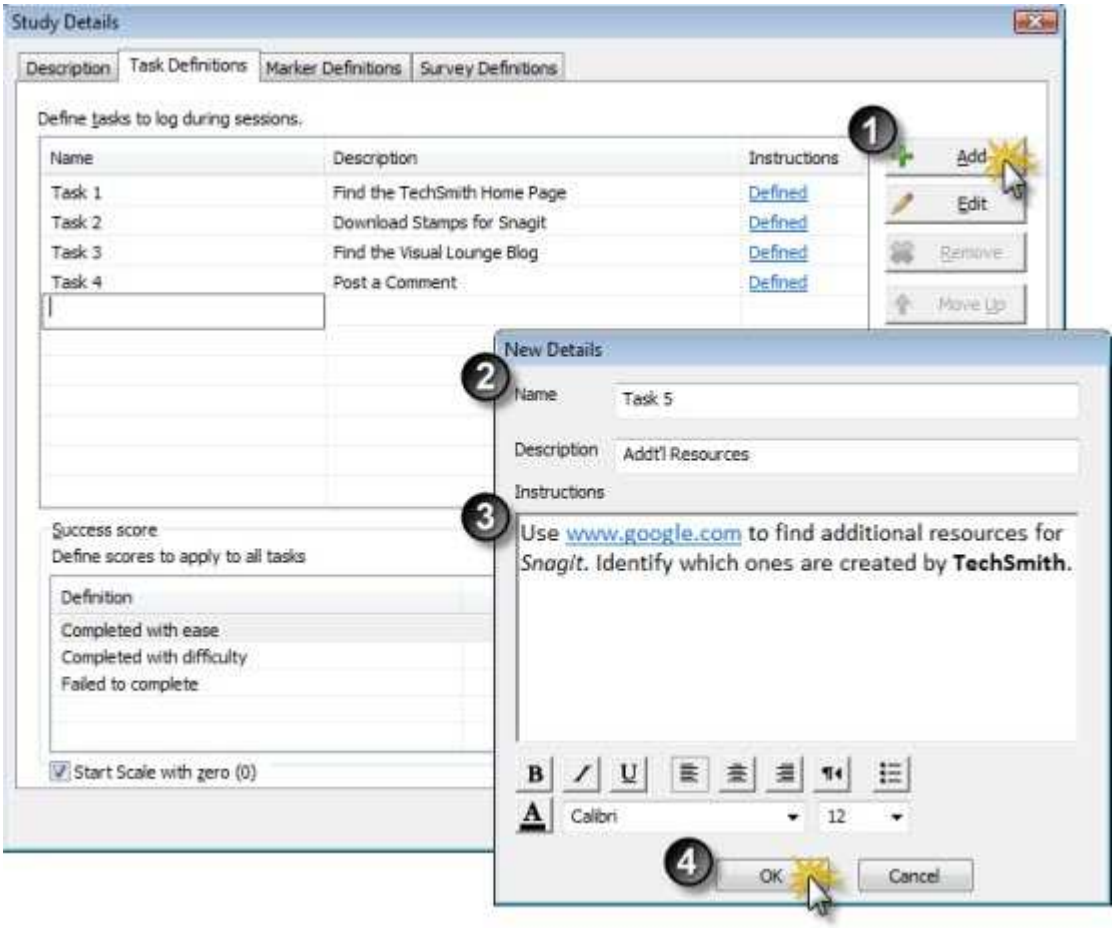
The fields in the *Task Definitions* tab of the *Study Details* dialog box define the **task names, descriptions, instructions,** and **success scores.**

You can open the configuration in the Morae Add-In for Microsoft Office Word and drop the task definitions and instructions into a Word file to create handouts for participants. See **Create Session Handouts** for more information.

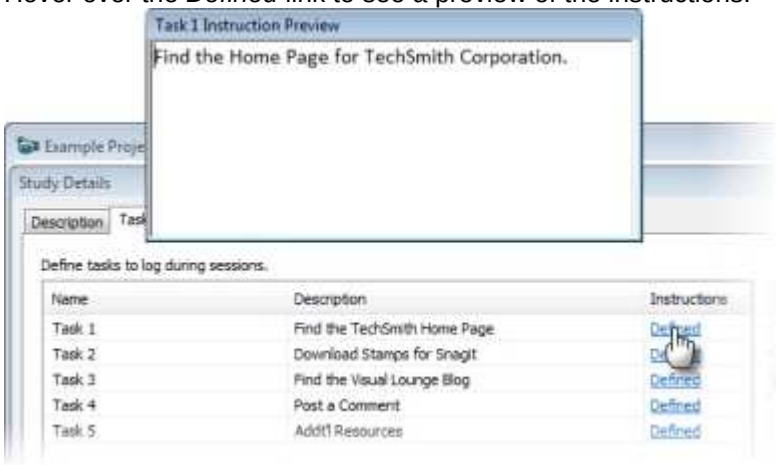
For information on working with tasks and success definitions in the *Task Definitions* tab, see **Modify Task and Success Score Definitions**.

To Define a Task

1	Click **Add** to create a new task.
2	Enter a name and description for the task.
3	Enter participant instructions for the task.
4	Click **OK**.



Hover over the *Defined* link to see a preview of the instructions.



See also:

- **Define the Study Description**
- **Define the Study Markers**
- **Define the Study Surveys**

Task Name and Description

The task name and description appear when observing a session. If you are the task logger, once you start a task, you choose the task from a dropdown list.

Put information in these fields to give the task logger enough information to quickly select the correct choice when starting a task.

After importing recordings into Manager, tasks become the basis for graphs created in Manager. You are also able to search across recordings for events or markers that occur during a given task.

See also:

- **Task Instructions**
- **Success Score**
- **Modify Task and Success Score Definitions**

Task Instructions

Task instructions appear on the computer running AutoPilot. The task instructions are presented to the participant to guide them through a session.

- After reading a task, the participant clicks **Start Task**, which automatically starts the designated task.
- After completing the task, the participant clicks **End Task**, which automatically stops the designated task.
- While working on a task, the participant can show or hide the instructions as needed.

You can also pull these instructions into Microsoft Word to create handouts if you are not using AutoPilot to run your session.

Put information in this field to describe the task for the participant.

See also:

- **Task Name and Description**
- **Success Score**
- **Modify Task and Success Score Definitions**

Success Score

Success scores apply to all the tasks in a study. If you are the task logger, after you stop a task, you choose the score from a dropdown list.

You can use the default completion rate scores or create your own scale.

After importing recordings into Manager, you can quickly create a task score graph to automatically calculate and visually display the completion rate. Completion rate is a standard metric used to analyze usability tests.

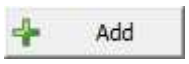
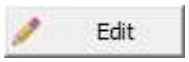
See also:

- **Task Name and Description**
- **Task Instructions**
- **Modify Task and Success Score Definitions**

Modify Task and Success Score Definitions

Once you save a study configuration, adding or modifying anything on this tab changes your study configuration. You will need to merge recordings if you want them in the same study in Manager. See the Morae Manager Help.

In the *Task Definitions* tab, use the following icons to modify the tasks and success scores.

Button	Use
	Click **Add** to create a new task or success definition. You can also click in an empty row to add a new task or success definition.
	Select a task or success definition and click **Edit** to modify the task name and description or success definition. You can also double-click in a field to edit it.
	Select a task or success definition and click **Remove** to delete a task or success definition. You can also select a row and press **Delete** to remove a task or success definition.
	Select a task and click **Move Up** to move a task up in the list. If your tasks are numbered, moving the task does not change the number.
	Select a task and click **Move Down** to move a task down in the list. If your tasks are numbered, moving the task does not change the number.

See also:

- **Task Name and Description**
- **Task Instructions**
- **Success Score**

Define the Study Markers

Recorder > Modify Study Details > Marker Definitions tab

The fields in the *Marker Definitions* tab of the *Study Details* dialog box define the **marker colors, types, definitions,** and **scores**.

Looking for a way to log a session discretely while facilitating a session? You can configure a Wii Remote to log markers. For more information, see **Configure Wii Remote for Logging**.

Markers allow you to flag important points in a recording including errors, quotes, and the start and end of tasks. For example, you can create markers for

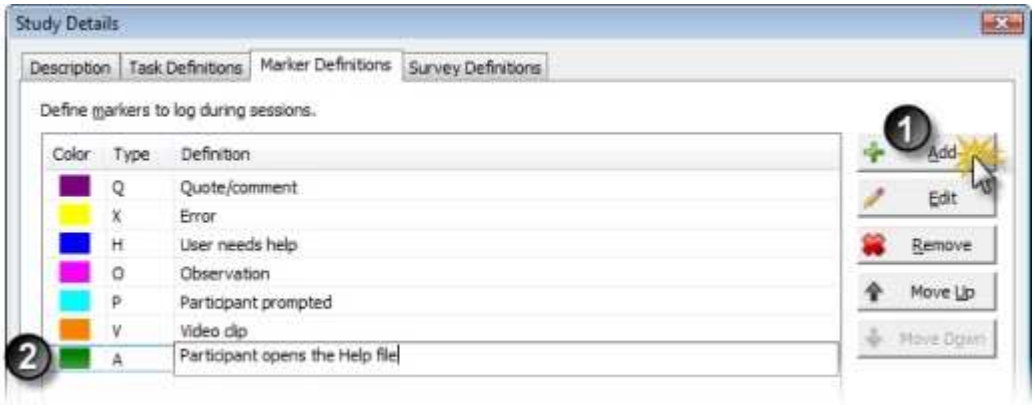
- Participant actions
- Participant comments and questions
- Observations about how the participant performs a task
- Interesting comments or actions to include in a highlight video

You can open the configuration in the Morae Add-In for Microsoft Office Word and drop the marker definitions into a Word file to use to prior to a session. For example, you may want share the markers with observers prior to the session to give them an idea what to watch for. See **Create Session Handouts** for more information.

For information on working with markers and score definitions in the Marker Definitions tab, see **Modify Marker and Marker Score Definitions**.

To Define a Marker

1	Click **Add** to create a new marker.
2	Select a color and type (letter) and add a description to define the marker. Observers can use <**Ctrl+ [letter]**> as a keyboard shortcut to log tasks in Observer, where **[letter]** is the letter assigned in the *Type* column.



Defined markers are available to observers as hotkeys. The hotkey is **<CTRL + Type (letter)>**. Observers can set undefined markers with **<CTRL + Space>**.

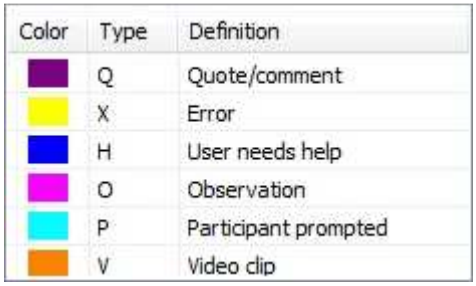
See also:

- **Define the Study Description**
- **Define the Study Tasks**
- **Define the Study Surveys**

Marker Color, Type, and Definition

The marker color, type, and definition appear when observing a session. People observing with Morae Observer can enter markers and add notes to these markers during the recording.

By adding markers and notes during a session, you can save time analyzing and automatically create graphs after importing the recordings into Morae Manager. If you cannot add markers and notes during a session, you can do so in Manager.



Color	Type	Definition
	Q	Quote/comment
	X	Error
	H	User needs help
	O	Observation
	P	Participant prompted
	V	Video clip

- *Color* distinguishes the markers on the Manager Timeline.
- *Type* is a letter that is used in combination with CTRL as a keyboard shortcut for entering a marker in Observer.
- *Definition* explains to observers what each marker should be used to flag during a session.

See also:

- **Marker Scores**
- **Modify Marker and Marker Score Definitions**

Marker Scores

Marker scores apply to all markers in a study. After entering a marker, observers can include a score. For example, if you use marker scores for errors, analysis would determine the average severity of the errors.

You can use the default marker scores or create your own scale.

After importing recordings into Manager, you can create marker score graphs to automatically calculate and visually display the marker severity rate.

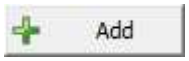
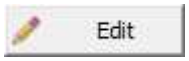
See also:

- **Marker Color, Type, and Definition**
- **Modify Marker and Marker Score Definitions**

Modify Marker and Marker Score Definitions

Once you save a study configuration, adding or modifying anything on this tab changes your study configuration. You will need to merge recordings if you want them in the same study in Manager. See the Morae Manager Help.

In the *Marker Definitions* tab, use the following icons to modify the markers and score scores.

Button	Use
	Click **Add** to create a new marker or marker score definition. You can also click in an empty row to add a new marker or marker score definition.
	Select a marker or marker score definition and click **Edit** to modify the marker color, type, and description or marker score definition. You can also double-click in a field to edit it.
	Select a marker or marker score definition and click **Remove** to delete a marker or marker score definition. You can also select a row and press **Delete** to remove a marker or marker score definition.
	Select a marker and click **Move Up** to move a marker up in the list.
	Select a marker and click **Move Down** to move a marker down in the list.

See also:

- **Marker Color, Type, and Definition**
- **Marker Scores**

Configure Wii Remote for Logging

Recorder > Modify Study Details > Marker Definitions tab > Configure Wii Remote

Facilitators with only one computer, or those who are working alone, can mark important moments during the session easily and quickly using a remote to set markers and start or end tasks without disrupting the participant. This frees up staff-time, allows for faster analysis, and doesn't require network privileges at remote testing sites.

Having problems connecting? Go straight to **Troubleshooting**.

Requirements

- Wii Remote

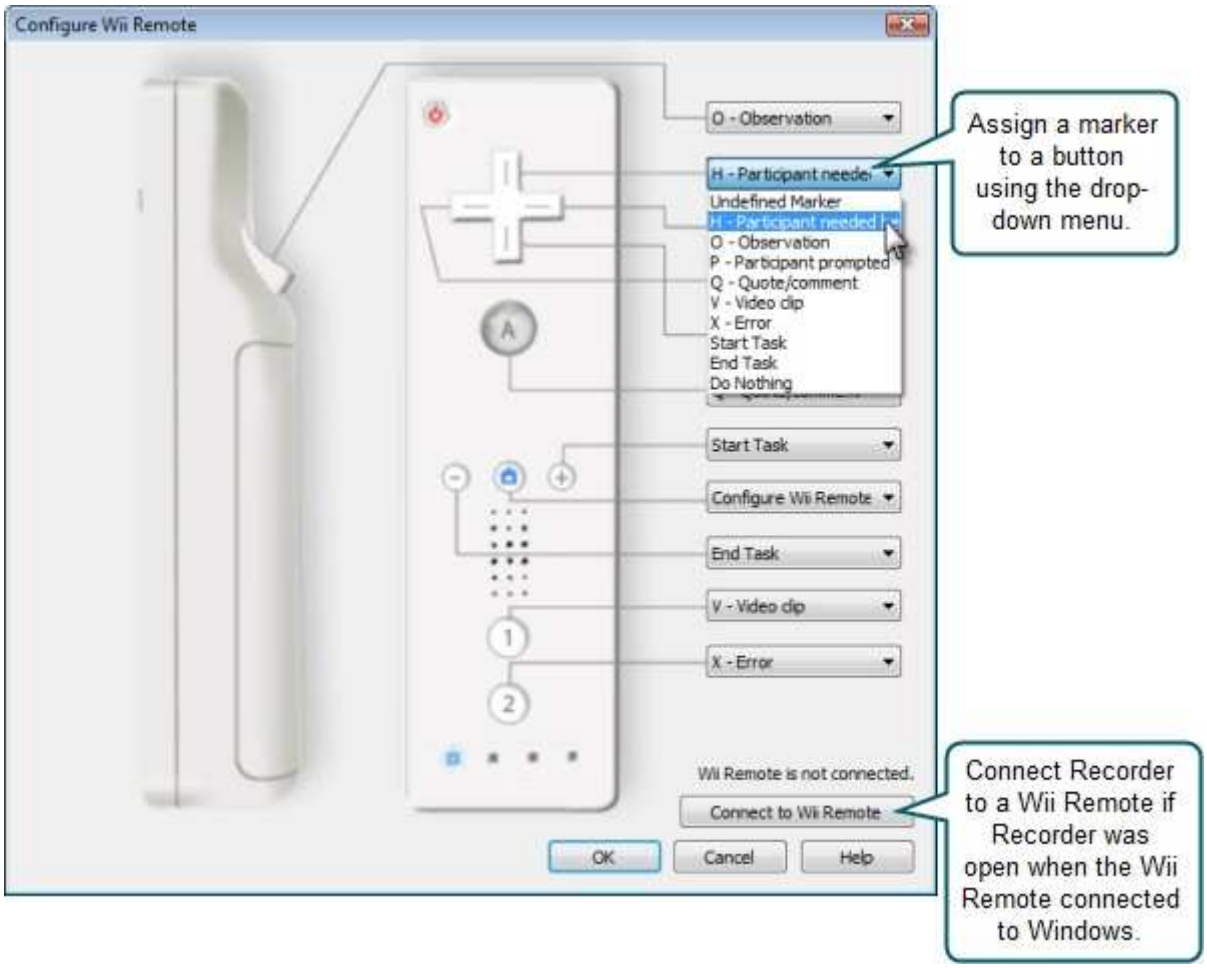
  You must purchase a Wii Remote to use this feature. Currently, the Wii Remote is the only supported remote device for use with Morae. Wii Remotes can usually be purchased for around $40 from many major retail, toy, or online stores.
- Bluetooth Capability

To use a Wii Remote to log tasks and create markers, your computer needs Bluetooth capability. Many laptops have Bluetooth functionality; most desktops will require a Bluetooth adapter of some kind.

Configure the Wii Remote

To configure the Wii Remote, click **Modifiy Study Details** > *Marker Definitions* tab > **Configure Wii Remote**. The Wii Remote is configured by study and can be configured when the Wii Remote is not connected to Recorder.

The *Configure Wii Remote* dialog window can be viewed in Observer, but settings cannot be changed. The Wii Remote configuration is a part of the study configuration.



The *Configure Wii Remote* dialog box can be opened directly from the Wii Remote after it is connected to Recorder by pressing the button.

Connect the Wii Remote

1. To make the Wii Remote findable by your computer, push and **continue to hold** both the 1 and 2 buttons on the Wii Remote. The blue LED lights on the Wii Remote flash, indicating the Wii Remote is ready to connect.

It is important that you continue to hold the buttons down during this entire process.

2. Open *Bluetooth Devices* located in the Windows Control Panel (click **Classic View** in the Windows Vista operating system to find this more easily.)
3. Click **Add** on the *Devices* tab.
4. The Bluetooth Device Wizard displays available devices. Select the Wii Remote, which should show up as a Nintendo device, and click **Next**.
5. Select **Don't use a passkey** and click **Next**.

   Windows gives a notification when it has connected to the Wii Remote. You can now release the buttons.

   The lights on the Wii Remote will continue to flash until it connects to Recorder.

6. Start Recorder. Recorder automatically connects to the Wii Remote. A battery indicator appears in the Recorder status bar.

   If Recorder is unable to connect to the Wii Remote, an error message is displayed. Close Recorder and attempt to connect again.

Reconnect the Wii Remote

Anytime your computer or the Wii Remote is turned off, you will need to reconnect the Wii Remote before you can use it again. Follow the same instructions given above to connect the Wii Remote.

Troubleshooting

- **The Wii Remote does not appear in the list of available Bluetooth devices to choose from:** The Wii Remote is not broadcasting. Make sure that it has batteries installed. When you hold the 1 and 2 buttons down, some or all of the LEDs should begin flashing. If they do not, consult the manual that came with your Wii Remote. The LEDs must flash during the entire connection process.
- **A dialog appears asking me to restart my computer:** This occurs if you have Morae open when connecting to the Wii Remote. Windows cannot replace drivers that are currently in use by Morae to talk to the Wii Remote. You should select the "Restart Later" option as it is not necessary to restart your session.
- **A notification with a red X appears telling me the drivers could not be installed and the Wii Remote then turns off:** This may happen if Morae is already open. Close Morae and then follow these steps.
  1. Open the *Bluetooth device* dialog box.
  2. Select the Wii Remote from the list of peripherals and then select **Properties**.
  3. Press and hold the 1 and 2 buttons on the Wii Remote as above, then select **Services**.
  4. Select **Drivers for keyboard, mice, etc.** and click **OK**.
  5. If a notification appears with a green check saying that the drivers were installed, you may release the buttons on the Wii Remote and start Morae. Otherwise, you should start the connection process from the beginning.

You can also use the Wii Remote to log in Observer. See the **Morae Observer Help** for more information.

The marks Nintendo® and Wii™ are marks owned by Nintendo of America, Inc. and Nintendo of America, Inc. is in no way affiliated or associated with TechSmith nor has it sponsored the content of the materials or the products or services referenced in the same.

See also:

- **Log with a Wii Remote**
- **Log a Session**

Define the Study Surveys

Recorder > Modify Study Details > Survey Definitions tab

Survey Definitions tab of the *Study Details* dialog box **lists the surveys available** in a study and **associates a survey with a point in the session**, such as the end of the task**.**

You can either **Create a Survey Using Custom Questions** or **Create a Survey Using System Usability Scale Questions**.

Morae includes the ability to deliver multiple surveys during a session. The participant answers are captured and saved with the recording file. When you import the recordings into Manager, you can review, adjust, analyze, and graph survey responses.

You can open the configuration in the Morae Add-In for Microsoft Office Word and drop surveys into a Word file to create handouts for participants. See **Create Session Handouts** for more information.

See also:

- **Define the Study Description**
- **Define the Study Tasks**
- **Define the Study Markers**

Survey Name

The survey name appears as the title of a survey dialog box and identifies a survey in the study configuration.

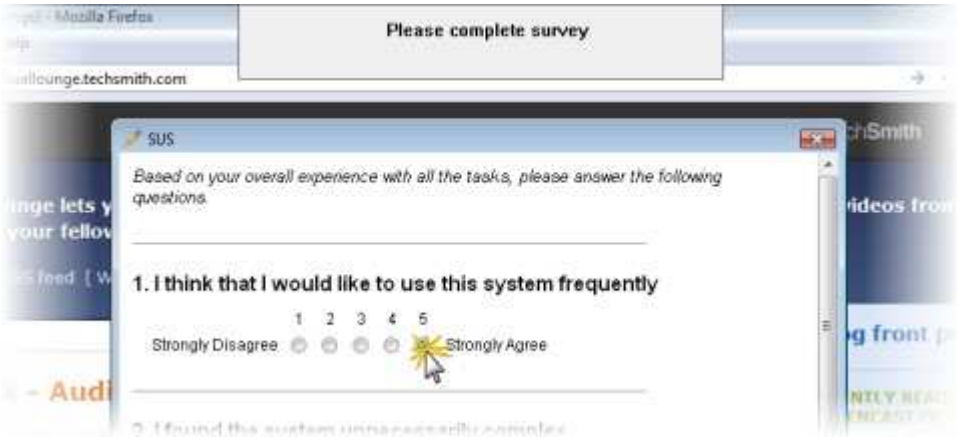
You can only edit the name of an existing survey in the Survey Definition tab. To create a new survey, click the **Add** button. For information on how to create a new survey, see **Create a Survey Using Custom Questions** and **Create a Survey Using System Usability Scale Questions**.

Survey Association

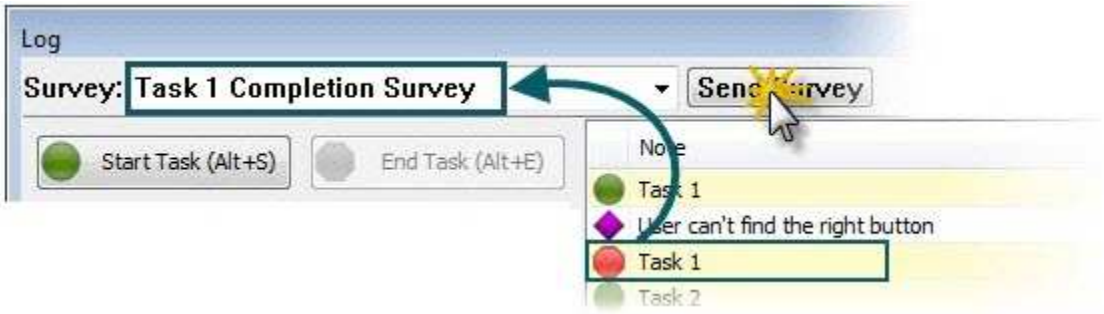
Choose to associate surveys with session events. Session events include the beginning and end of the recording, as well as the end of each defined task.

By associating a survey with a session event, it is “linked” to that event.

- AutoPilot automatically displays surveys when the associated session event occurs.


Please complete survey
SUS
Based on your overall experience with all the tasks, please answer the following questions.
1. I think that I would like to use this system frequently
1 2 3 4 5
Strongly Disagree
Strongly Agree

- Observer readies the survey associated with the current session event. Click **Send Survey** to display the survey.

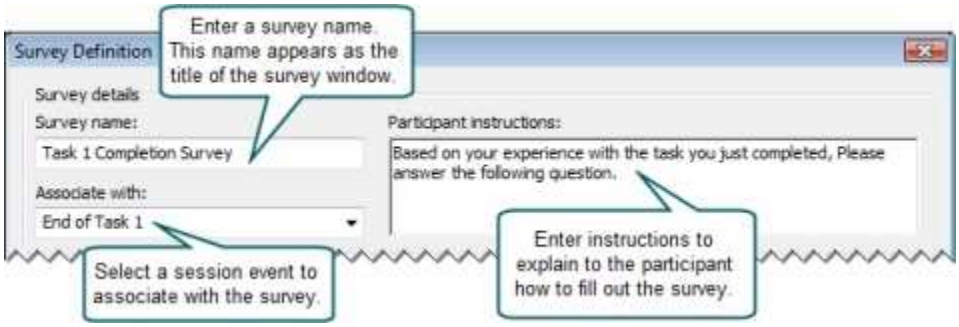


Create a Survey Using Custom Questions

Recorder > Modify Study Details > Survey Definitions tab > Add

To create a new survey:

1. In the *Survey Definitions* tab, click **Add**. The *Survey Definition* dialog box opens.
2. Enter the *Survey Details*.

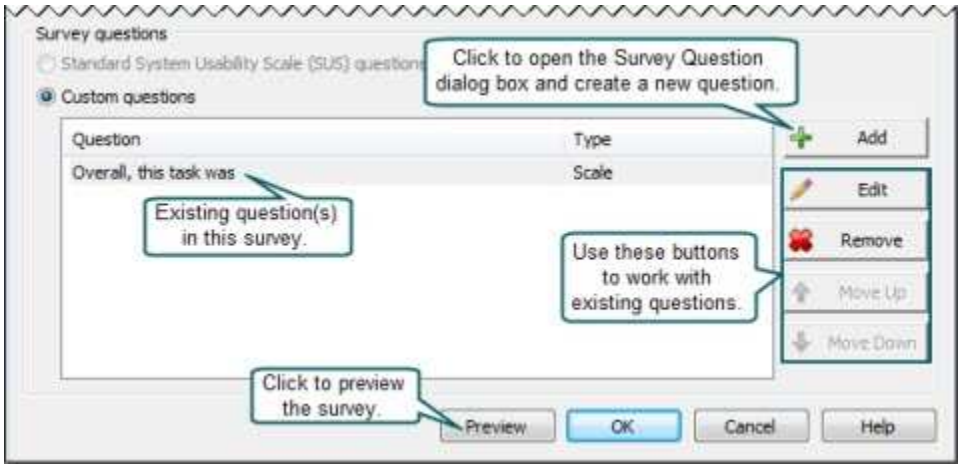

Survey Definition
Enter a survey name. This name appears as the title of the survey window.
Survey details
Survey name:
Task 1 Completion Survey
Associate with:
End of Task 1
Participant instructions:
Based on your experience with the task you just completed, Please answer the following question.
Select a session event to associate with the survey.
Enter instructions to explain to the participant how to fill out the survey.

You can also modify survey names and associations in the *Survey Definitions* tab of the *Study Details* dialog box.

3. Select **Custom Questions**.

For information on creating a survey using the SUS questions, see **Create a Survey Using System Usability Scale Questions**.

4. Define questions for the survey. For more on adding questions and the available types, see **Survey Question Types**.



5. When you finish adding questions, click **OK** to close the *Survey Definition* dialog box.

See also:

- **Create a Survey Using System Usability Scale Questions**
- **Survey Question Types**

Create a Survey Using System Usability Scale Questions

Recorder main interface > Modify Study Details > Survey Definitions tab > Add

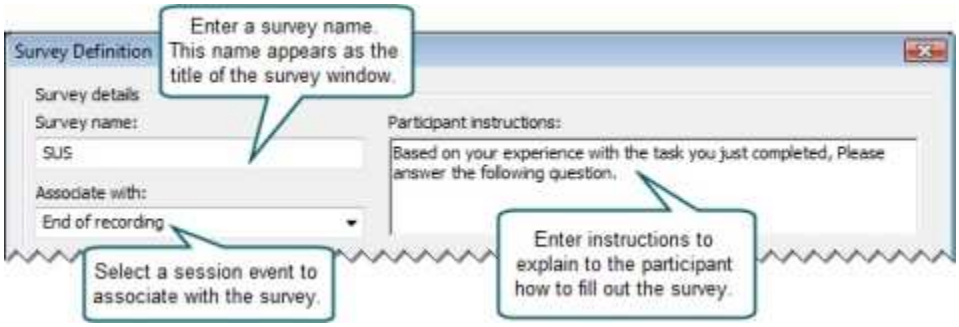
The System Usability Scale (SUS) is freely available for use in usability assessment and is used for a variety of research projects; the only prerequisite for its use is that any published report must acknowledge the source of the measure.

Acknowledgements
SUS was developed as part of the usability engineering program in integrated office systems development at Digital Equipment Co Ltd., Reading, United Kingdom.

Morae only allows you to use the SUS questions once in a study. You cannot modify the SUS questions.

To create a survey using the SUS questions:

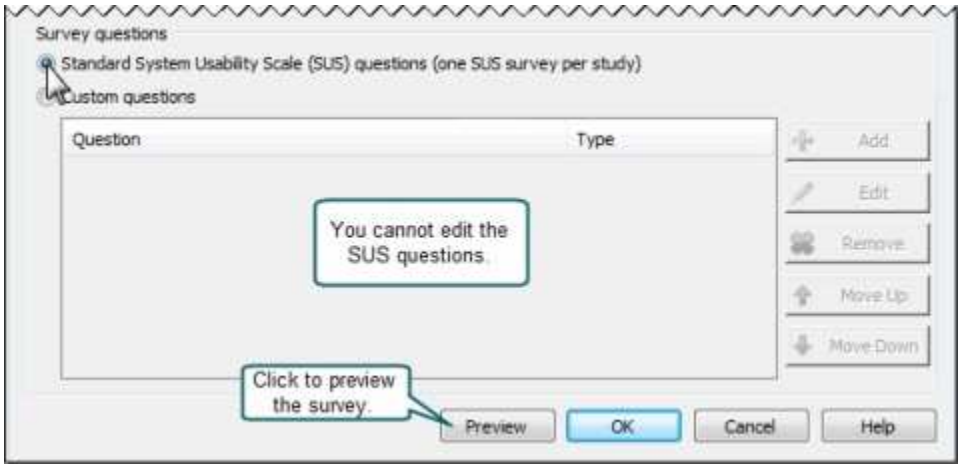
1. In the *Survey Definitions* tab, click Add. The *Survey Definition* dialog box opens.
2. Enter the *Survey Details*.


Survey Definition
Enter a survey name. This name appears as the title of the survey window.
Survey details
Survey name:
SUS
Associate with:
End of recording
Participant instructions:
Based on your experience with the task you just completed, Please answer the following question.
Select a session event to associate with the survey.
Enter instructions to explain to the participant how to fill out the survey.

You can modify survey names and associations in the *Survey Definitions* tab.

3. Select **Standard System Usability Scale (SUS) questions (one SUS survey per study)**.

For information on creating a survey using custom questions, see **Create a Survey Using Custom Questions**.



4. Click **OK** to close the *Survey Definition* dialog box.

See also:

- **Create a Survey Using Custom Questions**
- **Survey Question Types**

Survey Question Types

Recorder > Modify Study Details > Survey Definitions tab > Survey Definition > Add

Create custom questions or use the **System Usability Scale (SUS)** questions to populate your surveys.

You can use the SUS questions only once in a study.

Custom Question Types

You can create various types of questions including

Custom Survey Question Type	Example
Scale	How did you feel about this product? 1 2 3 4 5 Very Bad ○ ○ ○ ○ ◉ Very Good
Select one answer	Do you think you would buy this product? ◉ Yes ○ No ○ Depends on the cost
Select one or more answers	What kinds of computers are you familiar with? (select all that apply) ☑ PC ☑ Mac ☐ Linux
Freeform only answer	Do you have any final thoughts about this product?

See also:

- **Create a Survey Using Custom Questions**
- **Create a Survey Using System Usability Scale Questions**

Scale Question

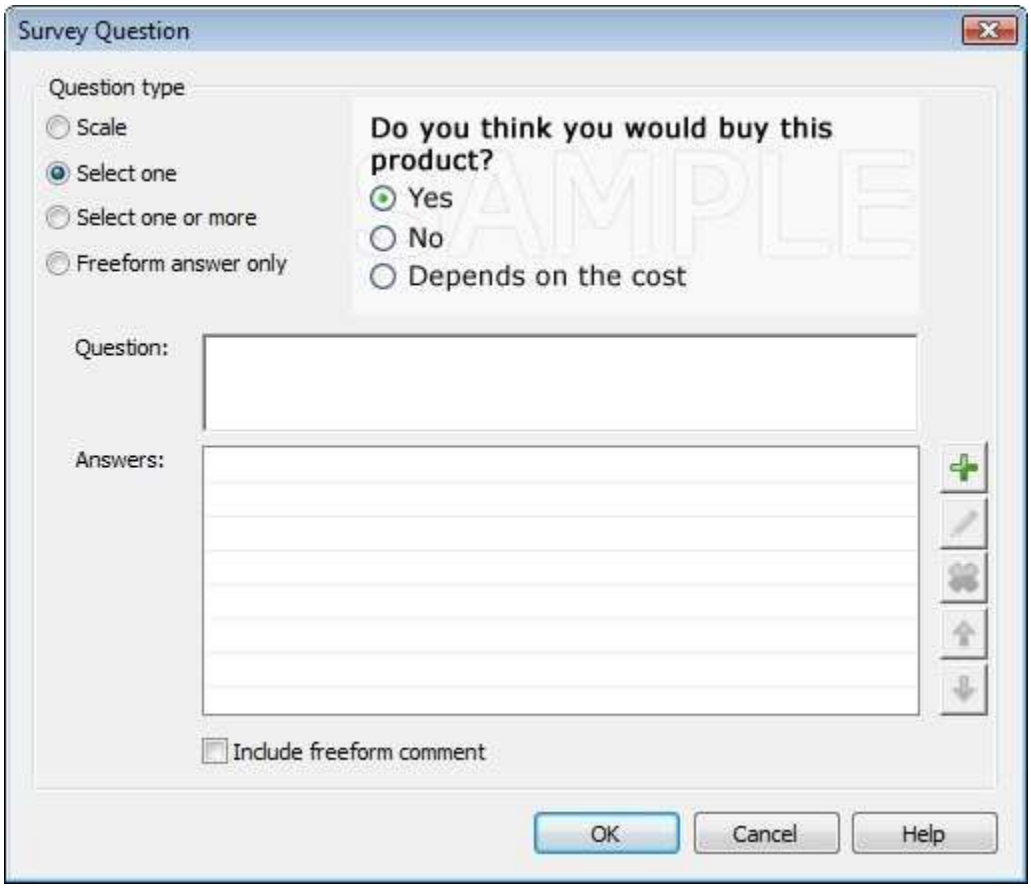
For a *Scale* question in a custom survey, you can define the question, the scale from 1-10, the labels for each end of the scale.

You can add a freeform answer to the Scale custom questions.

Select One Question

For a *Select One* question in a custom survey, you can define the question, the answers where participants can only select one answer and if you want to include a freeform comment.

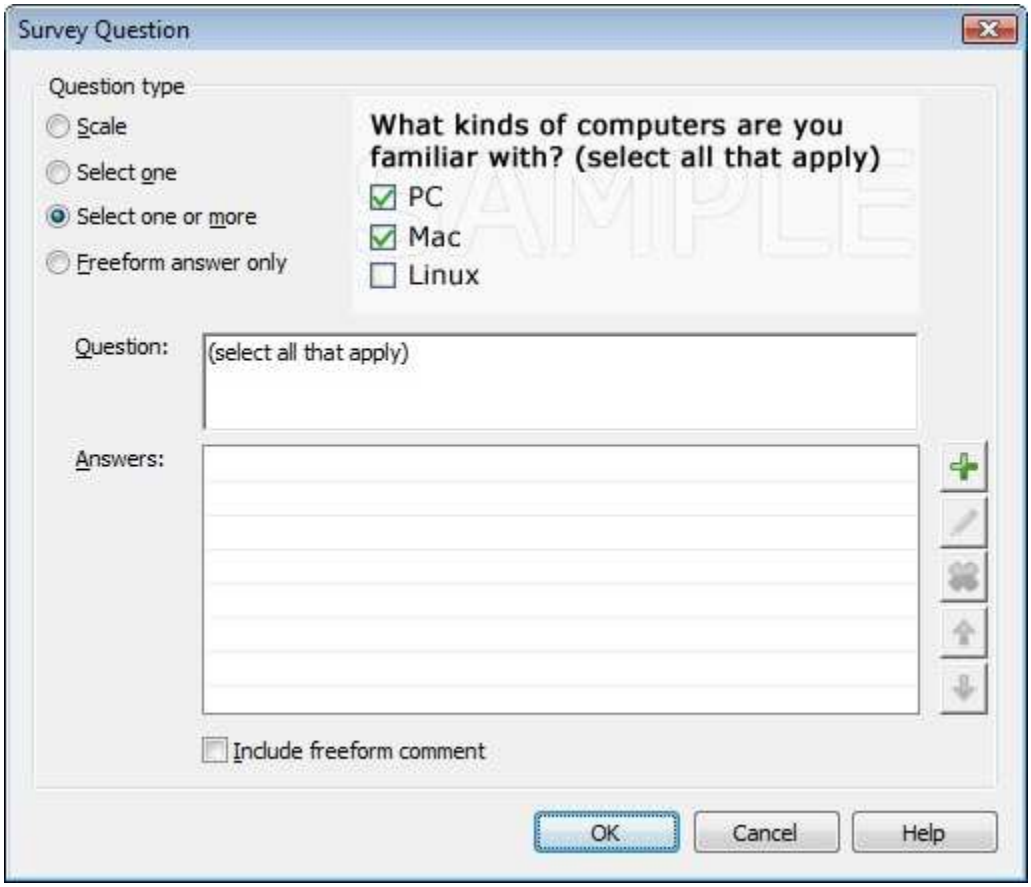
You can add a freeform answer to the Select one custom question.



Select One or More Question

For a *Select One or More* question in a custom survey, you can define the question, the answers where participants can select one or more of the answers and if you want to include a freeform comment.

You can add a freeform answer to the Select one or more answers custom questions.



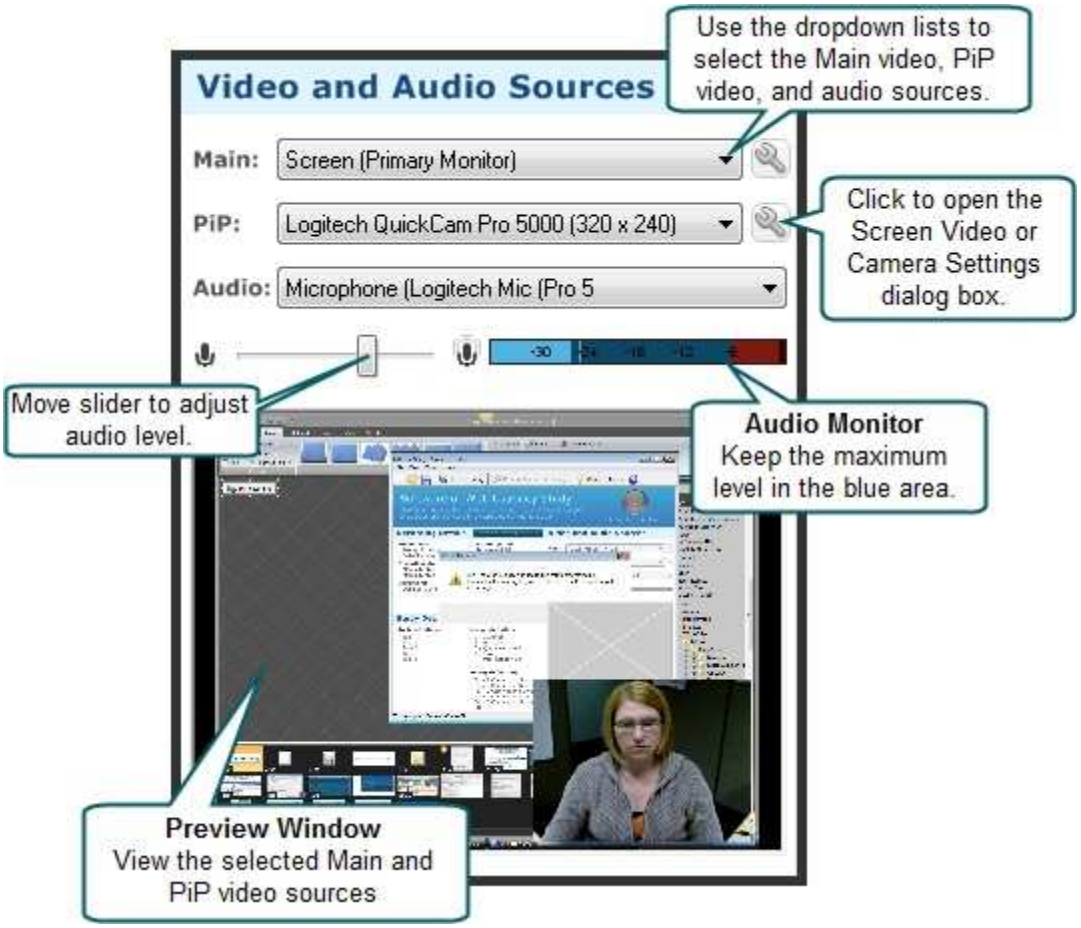
Freeform Question

For a *Freeform* question in a custom survey, you can define the question and have the participants enter a text answer or ask for participant comments.

Video and Audio Sources

The *Video and Audio Sources* pane allows you to view and select the sources for the main video, Picture-in-Picture (PiP) video, and audio. You can also adjust the audio level and preview the selected video sources.

Video and Audio Sources are affected by the hardware connected to the computer when Recorder opens. Always verify the selected sources prior to recording start.


Use the dropdown lists to select the Main video, PiP video, and audio sources.
Video and Audio Sources
Main:
Screen (Primary Monitor)
PiP:
Logitech QuickCam Pro 5000 (320 x 240)
Audio:
Microphone (Logitech Mic (Pro 5
Click to open the Screen Video or Camera Settings dialog box.
Move slider to adjust audio level.
Audio Monitor
Keep the maximum level in the blue area.
Preview Window
View the selected Main and PiP video sources

Quick Tips for Setting Video and Audio Sources

- Record from the screen, camera, screen and camera, or two cameras. For more on the video options, see **Choose Video Sources**.
- You can flip your camera video, both vertically and horizontally, so you can set up your camera out of the way of the participant. To flip camera video, click **Modify camera settings** .
- If the audio is going into the red in the *Audio monitor*, move the audio slider to the left. For more on audio levels, see **Adjust Audio Level**.
- Click **Test Recording** in the Recorder toolbar to create a 15-second video test recording to verify the video and audio. For more information, see **Create a Test Recording**.
- Need to save disk space? You can change the size and frame rate of the recording. See **Modify Video Settings**.

- Morae chooses the recommended codec for screen and camera video. If you want to use a specific codec, see **Screen Video Compression Setup Options** or Camera **Camera Video Compression Setup**.
- If your video is too dark or you want to zoom in, some cameras allow you to adjust these settings. To change the camera properties and preview the results, see **Camera Properties Options**.

See also:

- **Choose Video Sources**
- **Examples**
- **Choose Audio Source**
- **Modify Video Settings**
- **Camera Video Settings**

Choose Video Sources

Use the dropdown lists to select from the various video sources. You can choose both a **Main Video** and a **PiP Video**, or just a main video source.

To see examples screenshots of the various options, see **Examples**.

If you record both main and PiP videos, after you import the recording into Manager, you can produce highlight videos with or without the PiP included. You can also adjust the location of the PiP.

Main Video

Select a video source and click **Modify screen video/camera settings** to adjust the video settings.

For the main video source, select from screen or camera. You have the following options:

- **Screen (Primary Monitor):** Record the desktop of the monitor set as the primary monitor.

  You can set the primary monitor in **Start > Control > Display > Settings tab**.
- **Screen (Entire Desktop):** Record the desktop of all monitors connected to the computer.

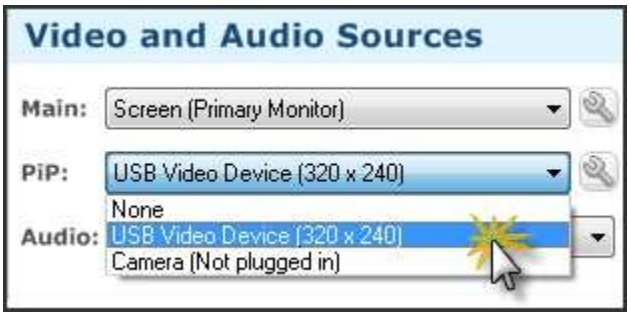
  The more monitors you record, the larger the recording file size.
- **Screen (Region):** Select and record a portion of the desktop.

  If you have multiple monitors, but only want to record from one that is not the primary monitor, use **Screen (Region)** to select the desktop of only one monitor. For more information, see **Select a Region**.
- **Camera:** Select from the connected cameras.

  To set up a configuration without the session cameras connected, select **Camera (Not plugged in)** to set a camera as the main video. Save the configuration and reopen it once a camera is attached. The camera is automatically selected as the main video source.

PiP Video

Select a video source and click **Modify camera settings** to adjust the video settings.



For the PiP video source, you can select a camera. You have the following options:

- **None:** Do not record a PiP video.
- **Camera:** Select from the connected cameras.

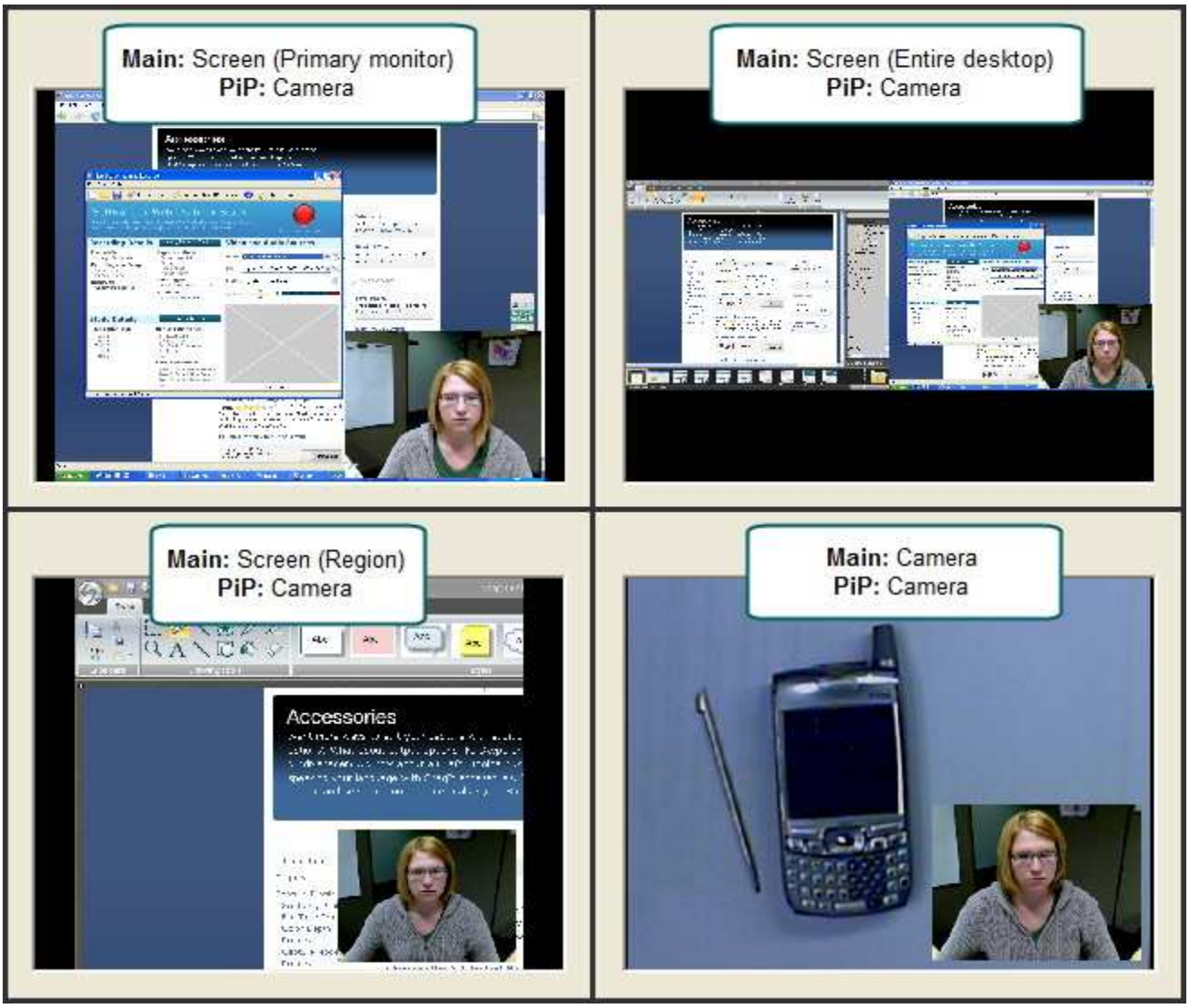
  To set up a configuration without the session cameras connected, select **Camera (Not plugged in)** to include a PiP video. Save the configuration and reopen it once a camera is attached. The camera is automatically selected as the PiP video source.

See also:

- **Examples**
- **Select a Region**
- **Choose Audio Source**
- **Modify Video Settings**
- **Camera Video Settings**

Examples

The following show example configurations as seen in the *Preview Window*.



See also:

- **Choose Video Sources**
- **Select a Region**
- **Choose Audio Source**
- **Modify Video Settings**
- **Camera Video Settings**

Select a Region

To record only a portion of the full computer desktop, choose to record any rectangular *Region* of the desktop.

You may want to record a region for any of the following reasons:

- You want to capture one monitor that is not the primary monitor.
- You want to capture an area that spans more than one monitor but do not want to record the entire desktop.
- You are only interested in what happens in one area of the desktop, possibly in one application. (Saves file size while recording at full size.)

To record a region:

1. Open Recorder.
2. Select Screen (Region) in the Main video source dropdown list.
3. Define the rest of the **study configuration**.
4. Click the **Record** button. The *Region Selection* dialog box opens.

5. Modify the selected region by:
   - Click and drag the corners of the region box.
   - Click the center of the region to move the entire region.
   - Click **Select Region** in the *Region Selection* dialog box. Click and drag to select a region.
6. After you select the correct region, click **Record** in the *Region Selection* dialog box to begin recording.

See also:

- **Choose Video Sources**
- **Examples**
- **Choose Audio Source**
- **Modify Video Settings**
- **Camera Video Settings**

Choose Audio Source

Use the dropdown list to select from the various audio sources or choose not to record audio. You can also use the **Adjust Audio Level** to view and adjust the audio level.

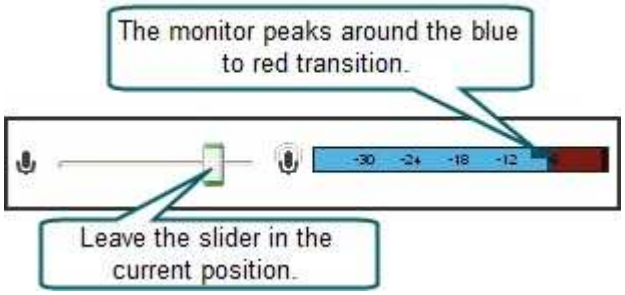
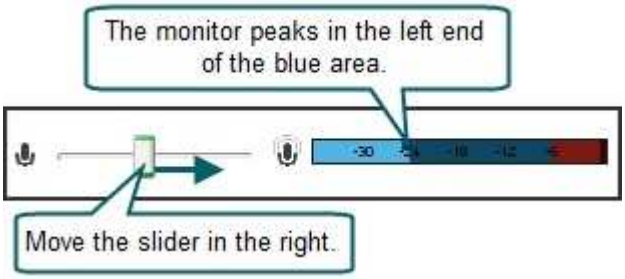
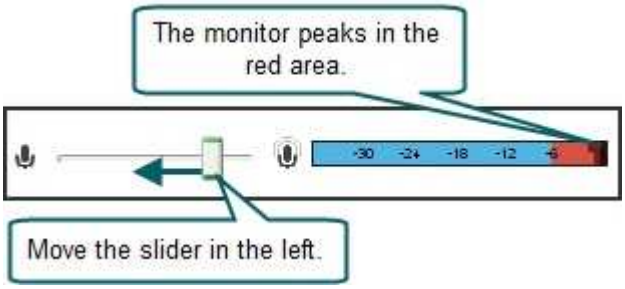
Use the dropdown list to select the audio source. You have the following options:

- **None:** Do not record audio**.**
- **Audio Devices:** Select from the available audio devices, including stand-alone microphones, computer sound cards, and camera microphones.

Adjust Audio Level

Use the Audio Monitor to view and adjust the audio level. Use the following to help you adjust the audio level.

Before each recording, **create a test recording** to verify audio levels.

Good Audio Level	
Low Audio Level	
High Audio Level	

Modify Video Settings

Click **Modify screen video/camera settings** to adjust the video settings. The exact settings available depend on the video sources you select.

See also:

- **Screen Video Settings**
- **How to Choose the Recording Compression**
- **Camera Video Settings**

Screen Video Settings

In the *Screen Video* dialog box, choose the compression and performance options that match your recording situation.

> The *Screen Video* options apply to the capture of screen video only and not to the video input from a camera.

Need help choosing a compression options? See **How to Choose the Recording Compression**.

The following are the settings available when you use screen as the main video source.

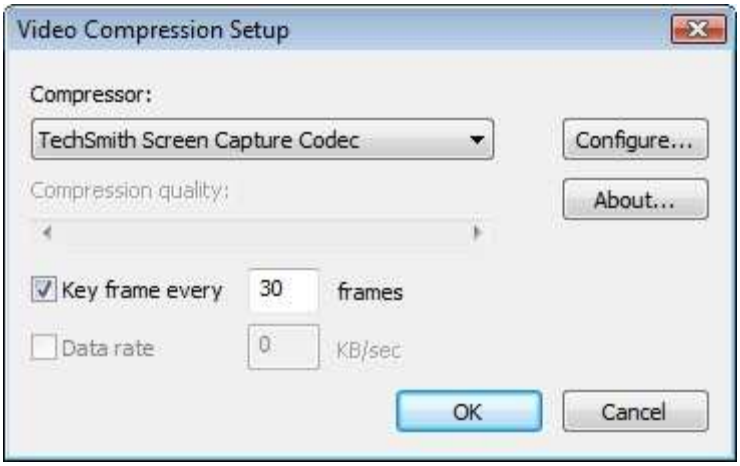
Option	Description and Use
Lossless video (recommended)	Provides the best quality video recording for most situations. If your screen video contains full motion (such as video playback), this option may increase recording file size.
Full motion video	Provides good quality with full motion recordings while keeping the recording file sizes down.
Custom compression (advanced)	Select a custom codec. We do not recommend selecting this option unless you are an advanced codec user.
Video Compression Setup	Opens the *Video Compression Setup* dialog box with a list of available codecs. You can also adjust any compression settings. For more information, see **Screen Video Compression Setup Options**.
Frame rate	Enter the frame rate (in frames per second). The default setting is five frames per second. We recommend keeping this default.
Disable display acceleration during capture	Disables hardware acceleration during recording. Checking this box generally results in better screen video recordings.
Remove desktop wallpaper during capture	Disables any desktop wallpaper on the Recorder computer. Checking this box generally results in better compression of recording files and better system performance.
Restore Default	Restores the screen video options to the default settings.

Screen Video Compression Setup Options

In the *Video Compression Setup* dialog box, you can change your screen video codec selection and adjust compression quality and key frame rate. Additional configuration options for the codec may be available by clicking the **Configure** button in the *Video Compression Setup* dialog box.

For more information on codecs, see **Codecs in Morae**.

The contents of this dialog box may differ and certain options may be disabled, depending on the screen video codec chosen.



Each codec has unique configuration options. For more information about a particular codec's options, consult the documentation from the company providing that codec.

The following table describes the *Video Compression Setup* dialog box.

Option	Description
Compressor	Select the codec from the dropdown list.
Compression quality	Configures the codec to compress at a lower image quality and create a smaller file size, or compress at a higher image quality, resulting in a larger file size. Adjust the compression quality using the slider bar. For higher quality, move the bar to the right. For lower quality, move the bar to the left.
Key frame every (n) frames	Specify how often to record a key frame. We recommend that you accept the default value for the codec. The codec places key frames at regular intervals, either spacing them by number of seconds or number of frames. Each codec has an optimized key frame setting.
Data rate (KB/Sec)	Determine the number of bytes of data the codec transmits or receives in one second. A higher data rate results in better quality and larger file sizes. If this option is available for the codec, place a checkmark in the adjacent box and specify the data rate in Kb/Sec.
Configure	Set configuration options for the selected compressor. For more information, see **Configure Video Compression Setup**.

Configure Video Compression Setup

The Configure button in the *Video Compression Setup* dialog box allows you to customize the compression settings for the video codec.

This table describes the TSCC codec. Each codec has its own unique configuration options. For information on each of those options, consult the manufacturer's documentation.

Option	Description and Use
Compression Control	Use the slider bar to choose faster compression (resulting in a larger file size) or better compression (resulting in a smaller file size). In all cases, the TSCC video codec is 100% lossless. Typically, you want faster compression during recording and a smaller file size when producing/editing.
Default	Resets the Compression Control slider to its default configuration.

How to Choose the Recording Compression

There are three options for selecting a screen recording codec:

- Lossless video
- Full motion video
- Custom

Use the following guidelines to choose a codec:

Compression Option	When to Use
Lossless video	In most cases, select this option when recording computer screen-based sessions. This option produces the highest quality recordings, but may create extremely large files if • The screen has a lot of motion (such as a video playing) • Camera is the main video source
Full motion video	Select this option if you are recording • Camera as the main video source • A screen with a lot of motion (such as a video playing)
Custom	Only for advanced users. If you choose custom video compression settings, you may not be able to record or use the recording in Manager.

Camera Video Settings

In both the *Main Camera Settings* and *PiP Camera Settings* dialog boxes, choose the compression and performance options that match your recording situation.

The following are the settings available when you use a camera as either the main or PiP video source.

Camera Tab Option	Description and Use
Flip	Flip the video vertically, horizontally, or both.
Camera Properties	Opens the Camera *Properties* dialog box to adjust various aspects of video quality, such as brightness, contrast, sharpness, RGB values, etc. For more information, see **Camera Properties Options**.
Main Camera Video Format	Opens the *Camera Video Format* dialog box to adjust variables such as frame rate and output size. For more information, see **Camera Video Format**.

Camera Properties Options

The camera manufacturer provides the information in *Camera Properties* dialog box and the options available in the dialog box vary.

In general, you can adjust various aspects of image quality, such as brightness, contrast, gamma, sharpness, RGB values and exposure.

> The preview in the *Main Camera Settings* dialog box updates so that you can immediately see how the settings affect the video.

For more information about the options in the camera *Properties* dialog box, consult the camera manufacturer.

We recommend using the default settings for your camera. The defaults are optimized to give you the best overall video quality.

Camera Video Format

In the *Camera Video Format* dialog box, select the size of the video, the framerate, and the codec.

Option	Description and Use
Video Size	Use the default sizes or lower the size for smaller video and file size. The dimensions given with the Video Size slider are approximate and actually video size may vary depending on your camera properties.
Framerate	Select the framerate for the camera. The value of Max depends on your camera properties. If your captured video is choppy, try lowering the framerate setting.
Full motion video	Selects the recommended default camera video codec (Windows Media Video).
Custom compression	Selects a custom camera video codec. We do not recommend selecting this option unless you are an advanced codec user.
Video Compression Setup	Opens the *Video Compression Setup* dialog box to browse through a list of available codecs. For more information, see **Camera Video Compression Setup**.
Restore Default	Returns the options on this dialog box to the default settings.

Camera Video Compression Setup

In the *Video Compression Setup* dialog box, you can change your camera video codec selection and adjust compression quality and key frame rate. Additional configuration options for the codec may be available by clicking the **Configure** button in the *Video Compression Setup* dialog box.

For more information on codecs, see **Codecs in Morae**.

The contents of this dialog box may differ and certain options may be disabled, depending on the codec chosen.

Each codec has unique configuration options. For more information about a particular codec's options, consult the documentation from the company providing that codec.

The following table describes the *Video Compression Setup* dialog box.

Option	Description
Compressor	Select the codec from the dropdown list.
Compression quality	Configures the codec to compress at a lower image quality and create a smaller file size, or compress at a higher image quality, resulting in a larger file size. Adjust the compression quality using the slider bar. For higher quality, move the bar to the right. For lower quality, move the bar to the left.
Key frame every (n) frames	Specify how often a key frame is recorded. We recommend that you accept the default value for the codec you have chosen. The codec places key frames at regular intervals, either spacing them by number of seconds or number of frames. Each codec has an optimized key frame setting.
Data rate (KB/Sec)	Determine the number of bytes of data the codec transmits or receives in one second. A higher data rate results in better quality and larger file sizes. If this option is available for the codec, place a checkmark in the adjacent box and specify the data rate in Kb/Sec.
Configure	Set configuration options for the selected compressor. For more information, see **Configure Video Compression Setup**.

Configure Video Compression Setup

The Configure button in the *Video Compression Setup* dialog box allows you to customize the compression settings for the video codec.

This table describes the TSCC codec. Each codec has its own unique configuration options. For information on each of those options, consult the manufacturer's documentation.

Option	Description and Use
Compression Control	Use the slider bar to choose faster compression (resulting in a larger file size) or better compression (resulting in a smaller file size). In all cases, the TSCC video codec is 100% lossless. Typically, you want faster compression during recording and a smaller file size when producing/editing.
Default	Resets the Compression Control slider to its default configuration.

AutoPilot

Morae AutoPilot presents study and task instructions along with surveys right on the computer running Recorder. By default, AutoPilot logs the start and end of tasks automatically, while Observers can still connect and log markers.

Uses of AutoPilot

There are many reasons to use AutoPilot. Here are some examples:

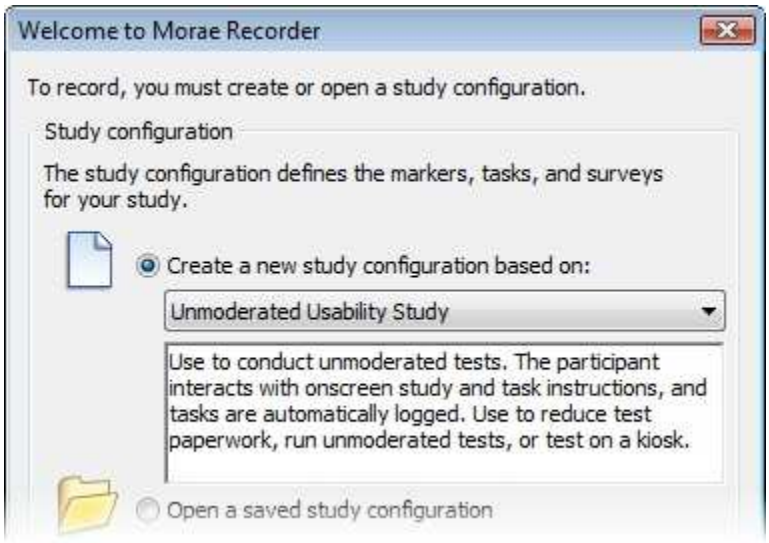
- You do not have someone to log tasks with Observer.
- You want to conduct unmoderated sessions.
- You want to log tasks automatically.
- You want to present surveys automatically.
- You want to avoid the need print task and survey paperwork.
- For more information on how an AutoPilot session works, see **Run an AutoPilot Session**.

Set Up AutoPilot

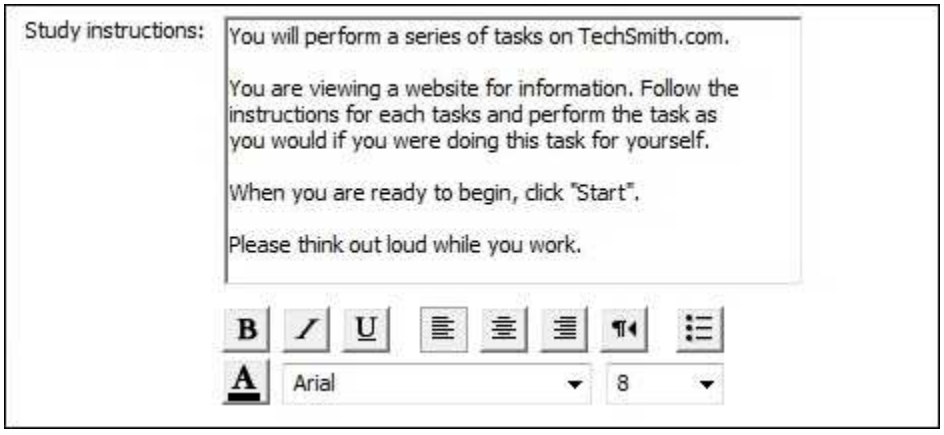
To set up Recorder to use AutoPilot, you can either **Use the Unmoderated Usability Study Template** or **Add AutoPilot to a Study Configuration**.

Use the Unmoderated Usability Study Template

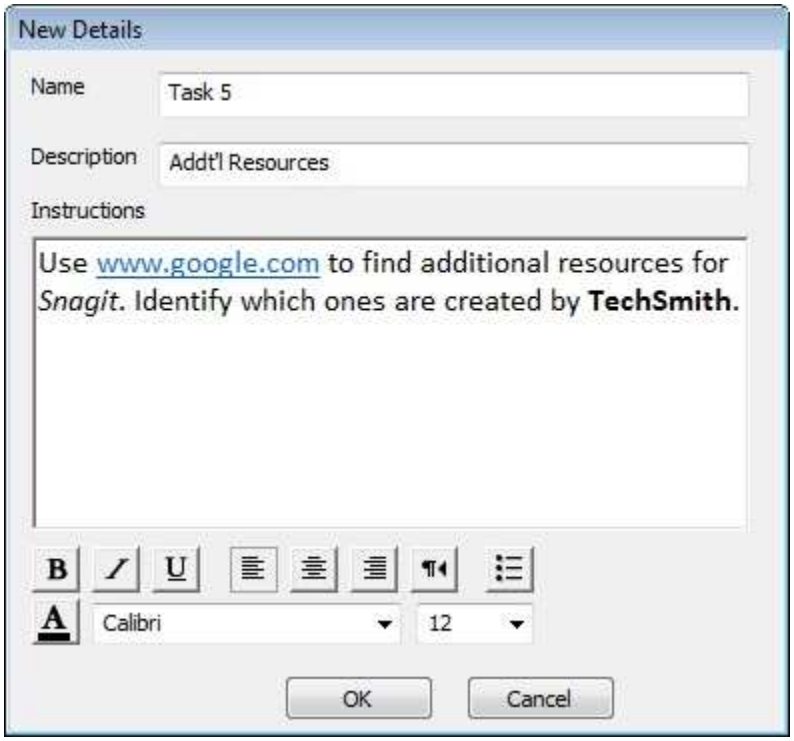
1. Open Recorder. The *Welcome to Morae Recorder* dialog box opens.
2. Select **Create a new study configuration based on**.
3. Select the *Unmoderated Usability Study* template from the dropdown list.


Welcome to Morae Recorder
To record, you must create or open a study configuration.
Study configuration
The study configuration defines the markers, tasks, and surveys for your study.
Create a new study configuration based on:
Unmoderated Usability Study
Use to conduct unmoderated tests. The participant interacts with onscreen study and task instructions, and tasks are automatically logged. Use to reduce test paperwork, run unmoderated tests, or test on a kiosk.
Open a saved study configuration

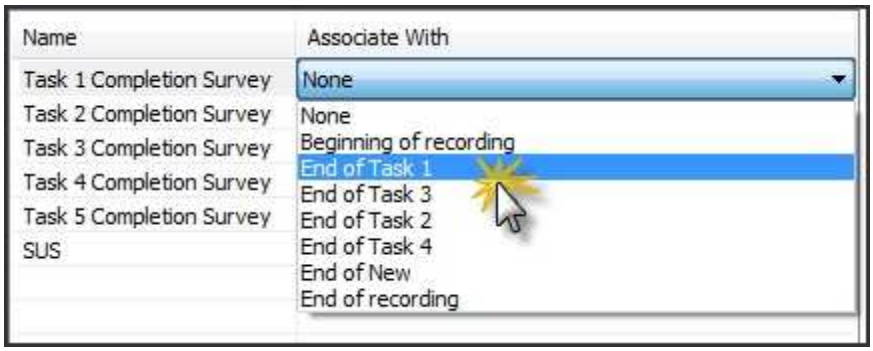
4. Click **OK**. The template study configuration opens in Recorder.
5. Click **Modify Study Details** to open the *Study Details* dialog box.
6. In the *Study Details* dialog box, **modify the study details** making sure to include the following:
   - *Description* tab**:** Fill in the **Study Instructions** field with directions for the participant. This could include an introduction to the test along with scenario information.


Study instructions:
You will perform a series of tasks on TechSmith.com.
You are viewing a website for information. Follow the instructions for each tasks and perform the task as you would if you were doing this task for yourself.
When you are ready to begin, click "Start".
Please think out loud while you work.
Arial
8

   - *Task Definitions* tab: Select an existing task and click Edit to open the Task Details dialog box. Fill in the **Instructions** field for all tasks. Include the task and any information a participant needs to complete the task, such as a user name and password.



- *Survey Definitions* tab: Create and associate surveys with session events, such as the end of Task 1. Only associated surveys automatically display with AutoPilot.



7. Click **OK**.

> The Recording Details are set up to run sessions with AutoPilot, record the screen and PiP, automatically restart after a recording ends, defer recording processing, and allow Observers. If you need the change these settings, click **Modify Recording Details**.

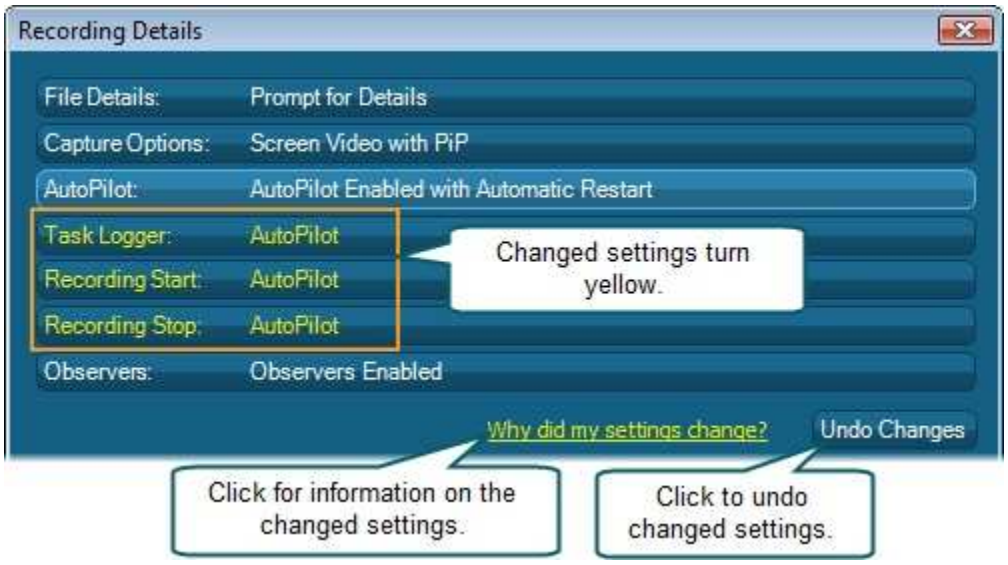
8. Save the study configuration file.

Add AutoPilot to a Study Configuration

1. Click **Modify Recording Details** to open the *Recording Details* dialog box.
2. In the *Recording Details* dialog box, click AutoPilot.

3. Select to **Enable AutoPilot**.

4. When you enable AutoPilot, all other settings needed to run an AutoPilot session automatically change to provide the recommended configuration.



5. Modify any other **recording details** and click **OK**.
6. Save the study configuration file.

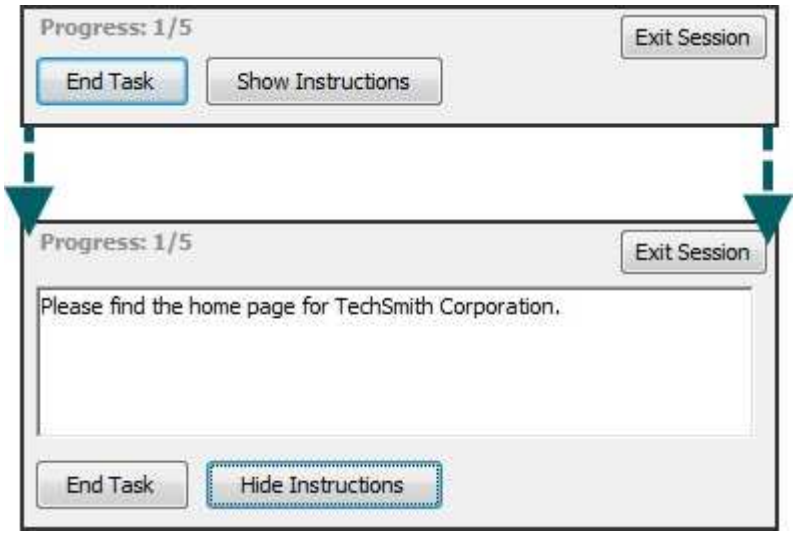
Run an AutoPilot Session

The following is the step by step of how an AutoPilot session works.

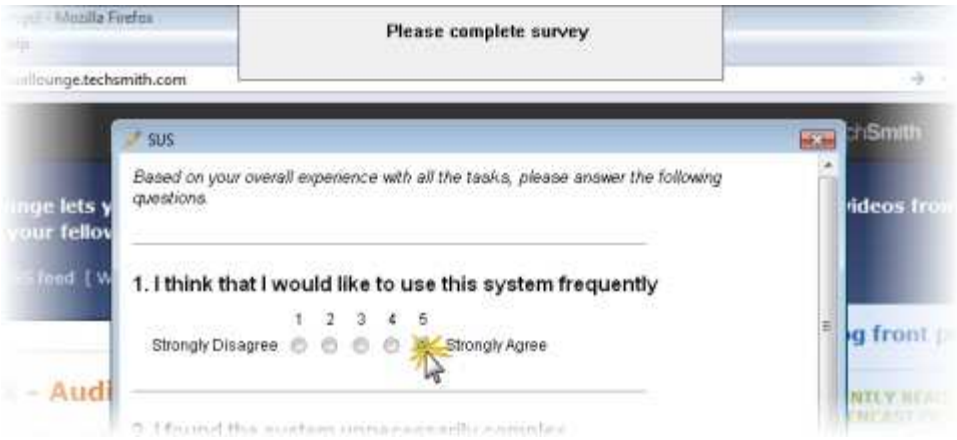
1. Open Recorder. The *Welcome to Morae Recorder* dialog box opens.
2. Select **Open a saved study configuration** and open your saved AutoPilot study configuration.
3. Click the **Record** button.
4. AutoPilot starts and displays the study instructions. The participant clicks **Start**.

Progress: 0/5
Exit Session
You will perform a series of tasks on TechSmith.com.
You are viewing a website for information. Follow the instructions for each tasks and perform the task as you would if you were doing this task for yourself.
When you are ready to begin, click "Start".
Please think out loud while you work.
Start

5. The first task displays. The participant reads the task and clicks **Start Task**.
   Recorder automatically starts the first task.
6. The AutoPilot window collapses and the participant works on the task.
   The participant can click **Show Instructions** to view the task instructions for the task.



7. The participant finishes the task and clicks **End Task**.
   Recorder automatically ends the task.
8. If there is a survey associated with the end of the task, it displays before moving to the next task.
9. The participant finishes the survey and clicks **Done**.
10. The next task displays. This process continues until the participant reaches the end of the test.
11. After the participant clicks **End Task** for the final task, if there is a survey associated with the end of the test, it displays.


Please complete survey
SUS
Based on your overall experience with all the tasks, please answer the following questions
1. I think that I would like to use this system frequently
1 2 3 4 5
Strongly Disagree
Strongly Agree

12. When the final survey is complete, a thank you message appears. The participant clicks **OK** to end the test.
13. If you have enabled the *Start a new AutoPilot recording automatically* option, a new test will appear and start recording when the participant clicks **Start**.

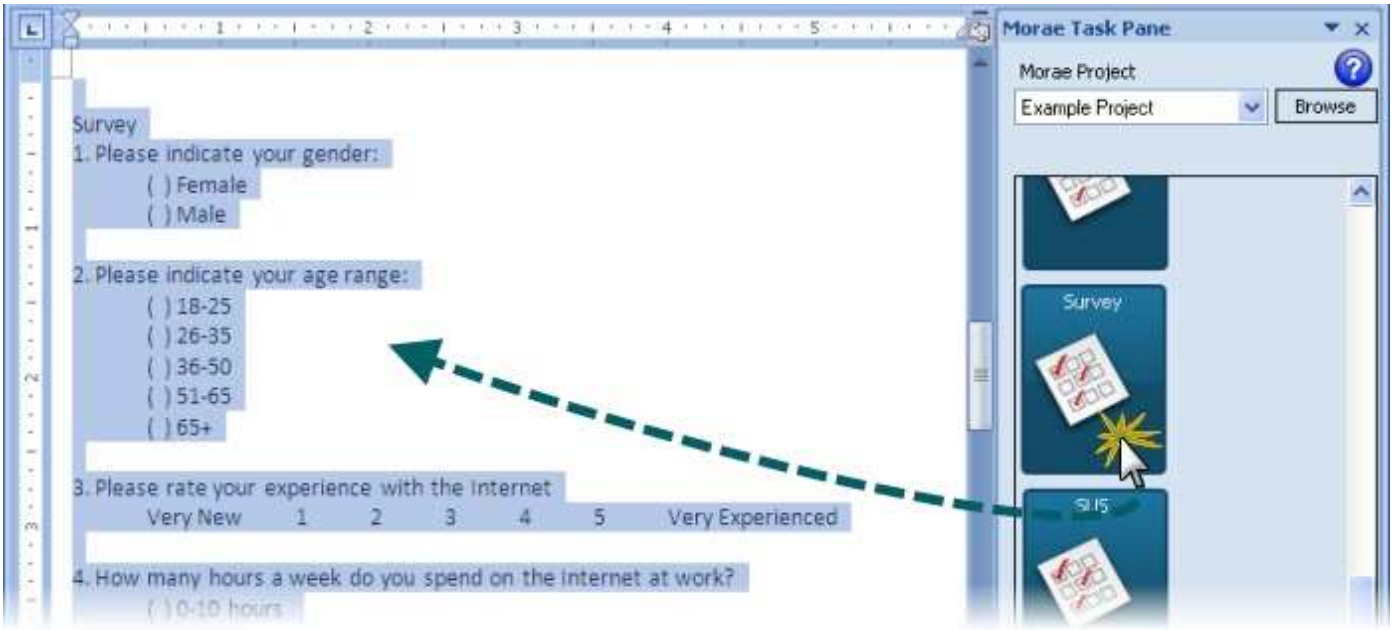
To exit the automatic restart and return to Recorder, click **Exit Session**. If prompted, enter the password set in the Recording Details.

Create Handouts

With the help of the Morae Add-In for Word, you can use a study configuration to create paper handouts for your sessions.

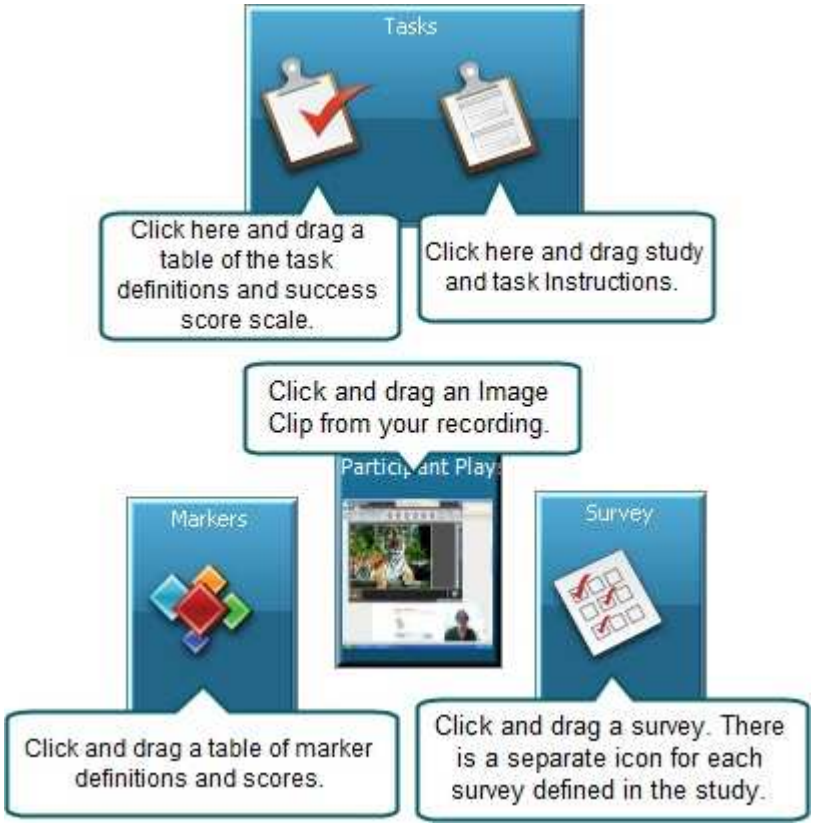
To create session handouts from a study configuration:

1. In Recorder, create a study configuration, making sure to enter the Study Instructions and Task Instructions in the *Study Details* dialog box.
2. Save the study configuration.
3. Open Microsoft Word and the Morae Task Pane.
   - In Word 2003, click the **Show Morae Wnd** button in the Word toolbar to open or close the Morae Task Window.
   - In Word 2007, by default, the Morae Task Pane opens with Word. Open or close the Morae Task Pane with the check box in **Add-Ins tab > TechSmith Morae group**.
4. In the Morae Task Pane, click **Browse** to locate the saved study configuration file (.mrcfg).
5. All **available study components** open in the Morae Task Pane. Click and drag the task Instructions and surveys to the open Word file.



6. Add page breaks and text formatting, as needed.
7. Save and print the handouts.

Study Components Available in the Morae Add-In for Microsoft Word


Tasks
Click here and drag a table of the task definitions and success score scale.
Click here and drag study and task Instructions.
Click and drag an Image Clip from your recording.
Markers
Survey
Click and drag a table of marker definitions and scores.
Click and drag a survey. There is a separate icon for each survey defined in the study.

Log a Session

When recording only camera video, you are able to log on the computer running Recorder. You can log markers, marker scores, and add text notes to save with the recording file. You can set up the Study Configuration to allow the person logging with Recorder or an Observer to logs tasks and task scores. At the end of a session, the tasks and task scores are saved with the recording.

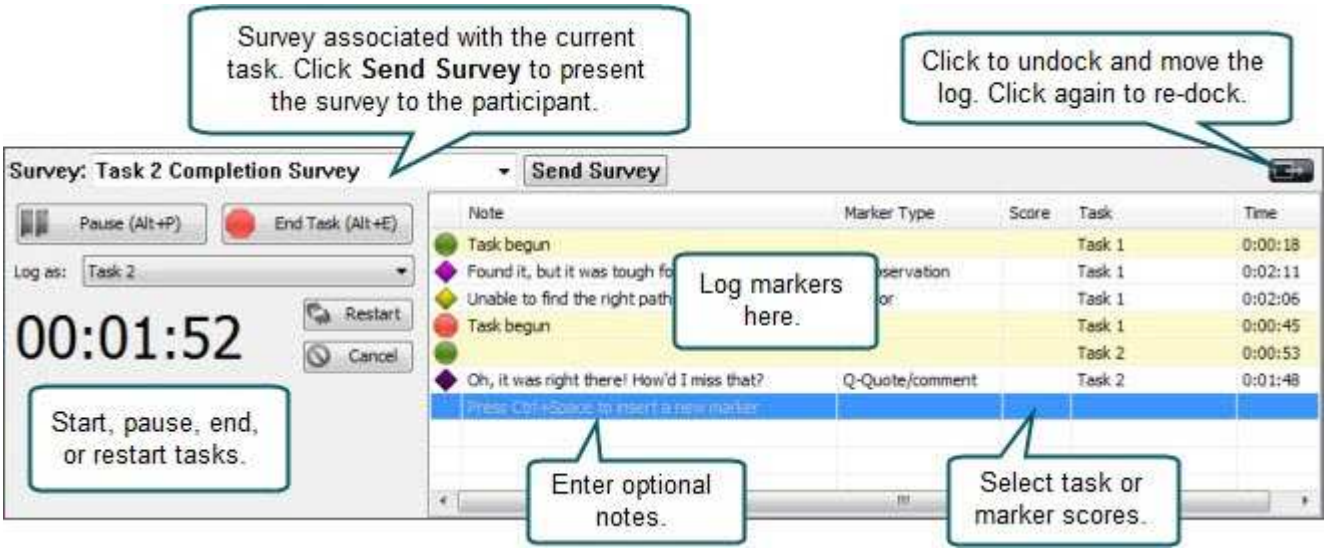
The components used when logging with the computer running Recorder are:

See also:

- **Customize Observer for Your Session**
- **Get to Know the Log**
- **Quick Tips for Logging a Session**
- **Markers**
- **Tasks**
- **Surveys**
- **Log with a Wii Remote**
- **View Recording Details**
- **View Your Notes and Markers Right After a Session**

Get to Know the Log

When logging, Recorder includes a Log displayed like a spreadsheet with rows and columns. The Log displays all markers entered in Observer during the recording. If you are the logging tasks, the Log also displays the tasks.The Log allows you to send surveys, if applicable.



Quick Tips for Logging a Session

- There are several different ways to log markers. Review **Different Ways to Log a Marker**.
- Only the task logger can view and log tasks. See **How to Log a Task**.
- You can rearrange the columns in the log in the most convenient order for you.
- During recording, you can go back and edit previously logged markers.
- Once you end a task you can change which task it is logged as. You can, however, change or update the note or score associated with the task. You can only change the task after you import it into Manager.
- The markers and tasks defined in the study configuration are available to log. See **Define a Study Configuration in Recorder** for information on setting up a study configuration.
- If you are on your own to facilitate and log a session, you may want to **Log with a Wii Remote**.
- Log marker and task scores to use in Manager during analysis. For example, if you log marker scores, you can create a graph that automatically calculates error severity rate.
- While you can add markers, tasks, and scores in Manager after importing the recording, you will save time by logging tasks and markers during a session.
- You can save a copy of the Log after each session as a .txt file to print or open in other applications (i.e. Microsoft Excel). See **View Your Notes and Markers Right After a Session**.

See also:

- **Get to Know the Log**
- **Markers**
- **Tasks**
- **Surveys**
- **View Recording Details**

Markers

Use markers to quickly log important points in a recording. During analysis, you can quickly find and review the markers to identify points of interest. You can set an unlimited number of markers in a recording.

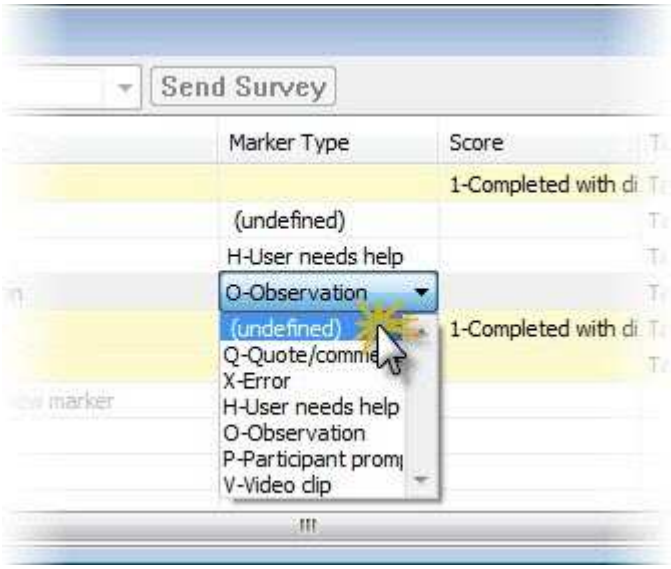
Markers are recording-specific (defined in the study configuration) and all observers for a recording use the same set of pre-defined markers to work with.

During recording, you can go back and edit previously logged markers and tasks. You can also edit or add markers, tasks, or scores in Manager after importing the recording.

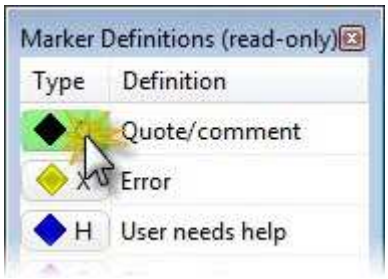
Different Ways to Log a Marker

When you see a point in the recording to mark, do one of the following to log a marker:

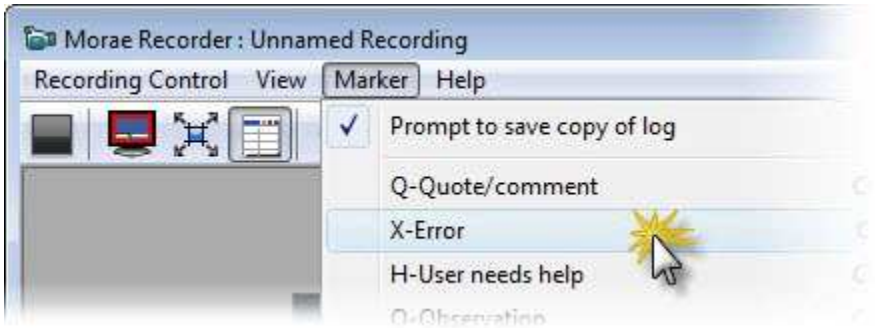
- Choose <**Ctrl+ [letter]**> on the keyboard. This only works for markers that are defined in the study configuration.
- Choose **<Ctrl + Space>** on the keyboard to insert an undefined marker. Select a type in the *Marker Type* column to define.
- In the *Marker Type* column, enter the letter of a marker.
- Pick a marker from the drop-down list in the *Marker Type* column.



- Click a defined **Type** button in the *Marker Definitions* window.



- Choose the **Marker** menu and select the letter (Type) from the menu. Defined markers appear at the top of the menu.



- **Log a marker with a Wii Remote**

See also:

- **Get to Know the Log**
- **Quick Tips for Logging a Session**
- **Tasks**
- **Surveys**
- **View Recording Details**

Tasks

While each observer can log markers, marker scores, and text notes, only the task logger can log tasks and task scores. The task logger is defined in the study configuration. For more information, see **Define Task Logger Options**.

If you **are** the task logger, a dialog tells you when you start the recording.
Morae Recorder
You are the task logger.
OK
If you **are not** the task logger, a dialog tells you who is when you start the recording.
Morae Recorder
Mary Johnson is the task logger.
OK

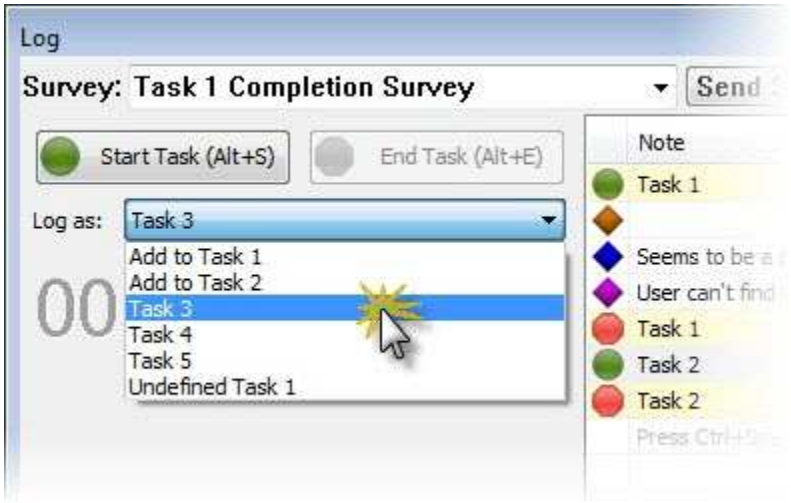
The task logger logs tasks using the tasks logging controls of the log as the participant performs tasks during the recording.

- If you start a task too early, click the **Restart** button to restart the task.
- After you start a task, click **Cancel** to abort the task. A Canceled Task icon appears in the log.
- If you end a task too early, click **Start** and select **Add to <task name>** in the dropdown list.
- Each time you log an Undefined Task, another Undefined Task appears in the dropdown. Undefined tasks are numbered and you can define them later in Manager.

While you can add markers, tasks, and scores in Manager after importing the recording, you will save time by logging tasks and markers during a session.

How to Log a Task

1. In the task logging controls, click **Start Task**.
2. Select a task from the *Log as* drop-down list.



3. Add an optional note.
4. Add markers during the task, as needed.
5. Click **End Task**.
6. Select a *Score*.
7. Send a task survey, if applicable. (See **How to Deliver Surveys**.)

See also:

- **Get to Know the Log**
- **Quick Tips for Logging a Session**
- **Markers**
- **Surveys**
- **View Recording Details**

Surveys

You can open (deliver) surveys anytime during the recording. While logging, read the survey questions to the participant and enter the answers in the open survey, or have the participant fill out the surveys on the computer running Recorder. You can later graph the answers in Manager.

You can have multiple surveys. Some ways to use surveys include, but are not limited to

- Pre-session demographic questionnaire
- Task completion survey
- Post-test satisfaction survey
- Session follow-up questions

Create and associate with session events, such as the end of a task, in the study configuration. See **Define the Study Surveys** for information about setting up surveys.

How to Deliver Surveys

To deliver a survey

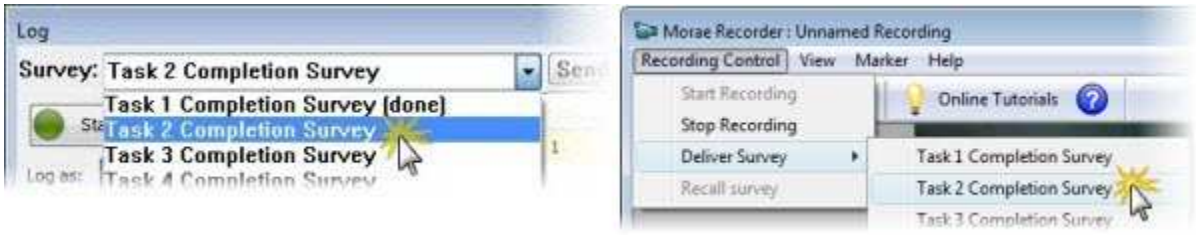
1. Select the survey from the survey dropdown list.

When end a task, the survey associated with that task is automatically selected in the dropdown list.

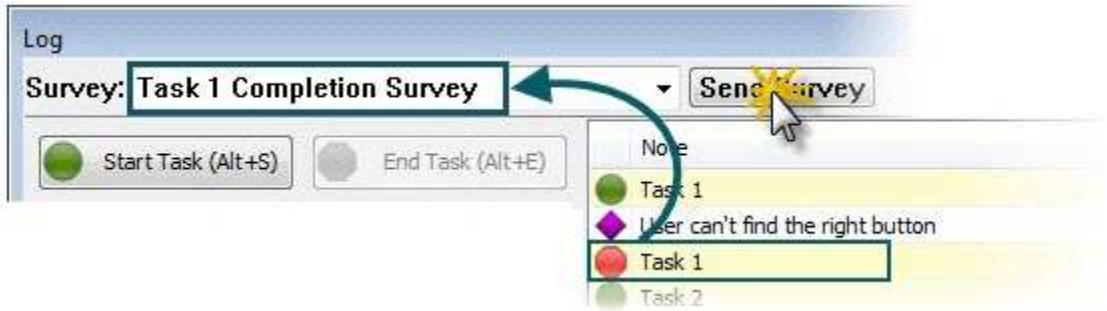
2. Click **Send Survey**.
   If you send the wrong survey, you can click **Recall** to close the survey.

Quick Tips for Surveys

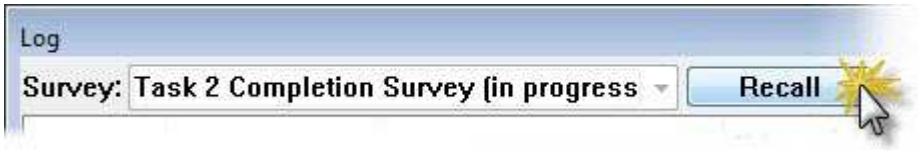
Surveys are available at the top of the Log and in the **Recording Control** menu.



- Surveys appear in the order they are entered into the study configuration.
- If linked to a session event, a survey is selected in the survey dropdown list when that session event occurs. For example, at the end of Task 1, the survey associated with the end of Task 1 is selected in the survey dropdown list.



- If you send the wrong survey, you can **Recall** a survey before it is complete.



- If a survey is already complete, you can send a survey again. Select a survey marked **done** and click **Send Survey**. Any answers already filled in are not removed, but you can adjust the answers, if needed.

See also:

- **Get to Know the Log**
- **Quick Tips for Logging a Session**
- **Markers**
- **Tasks**
- **View Recording Details**

Log with a Wii Remote

Facilitators with only one computer, or those who are working alone, can mark important moments during the session easily and quickly using a remote to set markers and start or end tasks without disrupting the participant. This frees up staff-time, allows for faster analysis, and doesn't require network privileges at remote testing sites.

To configure the Nintendo® Wii™ Remote, see **Configure Wii Remote for Logging**.

Requirements

- Wii Remote

  You must purchase a Wii Remote to use this feature. Currently, the Wii Remote is the only supported remote device. Wii Remotes can usually be purchased for around $40 from many major retail, toy, or online stores.

- Bluetooth Capability

  To use a Wii Remote to log tasks and create markers, your computer needs Bluetooth capability. Many laptops have Bluetooth functionality; most desktops will require a Bluetooth adapter of some kind.

Connect the Wii Remote

1. To make the Wii Remote findable by your computer, push and **continue to hold** both the and buttons on the Wii Remote. The blue LED lights on the Wii Remote flash, indicating the Wii Remote is ready to connect.

   It is important that you continue to hold the buttons down during this entire process.

2. Open *Bluetooth Devices* located in the Windows Control Panel (click **Classic View** in the Windows Vista operating system to find this more easily.)
3. Click **Add** on the *Devices* tab.
4. The Bluetooth Device Wizard displays available devices. Select the Wii Remote, which should show up as a Nintendo device, and click **Next**.
5. Select **Don't use a passkey** and click **Next**.

   Windows gives a notification when it has connected to the Wii Remote. You can now release the buttons.

   The lights on the Wii Remote will continue to flash until it connects to Recorder.

6. Start Recorder. Recorder automatically connects to the Wii Remote. A battery indicator appears in the Recorder status bar.

   If Recorder is unable to connect to the Wii Remote, an error message is displayed. Close Recorder and attempt to connect again. See also **Troubleshooting**.

Reconnect the Wii Remote

Anytime your computer or the Wii Remote is turned off, you will need to reconnect the Wii Remote before you can use it again. Follow the same instructions given above to connect the Wii Remote.

How to Log With the Remote

You can use the remote to log in one of two ways, depending what kind of main video source you use.

- Screen-based session

  When logging during a screen recording, you will not see any feedback on the screen. The Wii Remote lights flash to show that you logged a marker or task. Before logging a session, be sure to familarize yourself with the Wii Remote Configuration available in Recorder. Go to **Modify Study Details > Marker Definitions > Configure Wii Remote** to access this dialog.

- Camera video-based session

  You can also use a remote to interact with the log when recording camera as the main video source. To view the remote configuration to see what buttons set which markers, go to **View > Wii Remote Configuration**. The buttons on the remote work in the same way as using hotkeys. To log a marker or

task, push the corresponding button on the Wii Remote, as defined in the *Wii Remote Configuration* dialog box.

Troubleshooting

- **The Wii Remote does not appear in the list of available Bluetooth devices to choose from:** The Wii Remote is not broadcasting. Make sure that it has batteries installed. When you hold the 1 and 2 buttons down, some or all of the LEDs should begin flashing. If they do not, consult the manual that came with your Wii Remote. The LEDs must flash during the entire connection process.
- **A dialog appears asking me to restart my computer:** This occurs if you have Morae open when connecting to the Wii Remote. Windows cannot replace drivers that are currently in use by Morae to talk to the Wii Remote. You should select the "Restart Later" option as it is not necessary to restart your session.
- **A notification with a red X appears telling me the drivers could not be installed and the Wii Remote then turns off:** This may happen if Morae is already open. Close Morae and then follow these steps.
  1. Open the Bluetooth device dialog.
  2. Select the Wii Remote from the list of peripherals and then select properties.
  3. Press and hold the 1 and 2 buttons on the Wii Remote as above, then select "Services" from the dialog.
  4. Select "Drivers for keyboard, mice, etc." and select "Ok".
  5. If a notification appears with a green check saying that the drivers were installed, you may release the buttons on the Wii Remote and start Morae. Otherwise, you should start the connection process from the beginning.

You can also use the Wii Remote to log in Observer. See the **Morae Observer Help** for more information.

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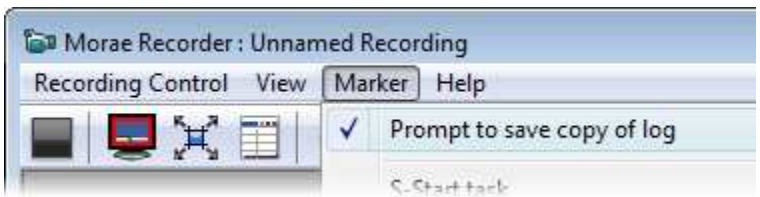
View Your Notes and Markers Right After a Session

After observing and logging a session, you may want quick access to the notes and markers created during the session. Use the following procedures to save and view your markers and notes.

- **Save Your Notes and Markers**
- **View Your Notes and Markers**

Save Your Notes and Markers

1. During a session, enable **Marker > Prompt to save copy of log**. (This option is enabled by default.)



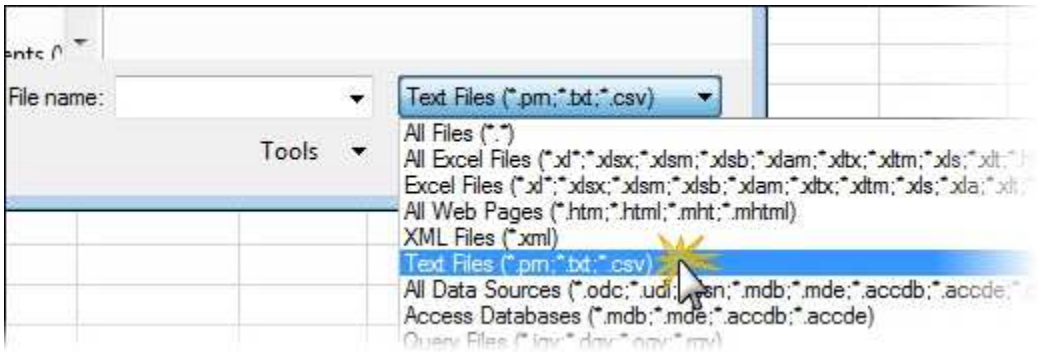
2. Proceed with the session, logging markers and notes. When you stop the recording, you are prompted to save your log.
3. Browse to the location to save your log and click **Save**. The file is saved as a text only file (.txt).

View Your Notes and Markers

You can open your log as plain text in a program such as Microsoft® Word® or Microsoft® Notepad, or for easier viewing, as a table in Microsoft Excel®.

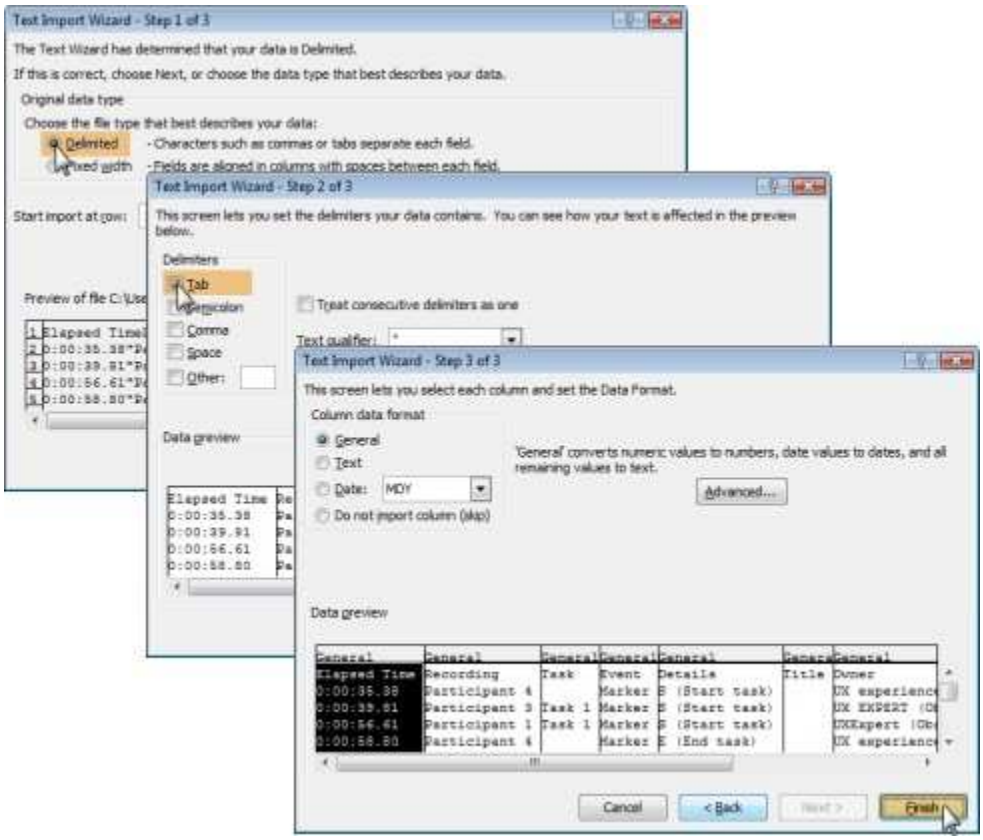
To open a .txt file in Excel:

1. Open Excel and choose
   - Windows Vista: **Office button > Open**
   - Windows XP: **File > Open**.
2. Choose **Text Files** in the *Files of type* dropdown list.



3. Navigate to and select the log file and click **Open**.
4. A message appears that Excel does not recognize the file format. Click **OK** to continue.

5. Follow the steps in the *Text Import* wizard.

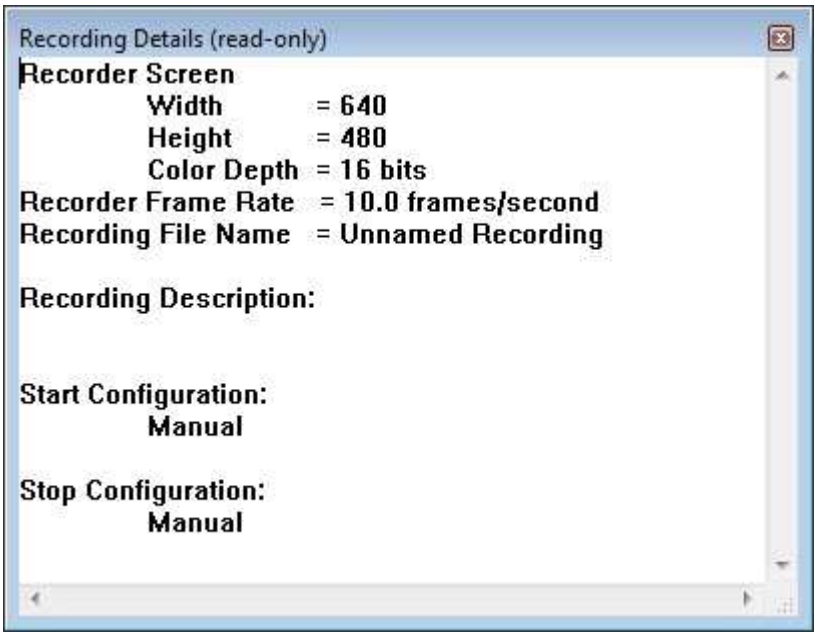


The log opens in Excel.

View Recording Details

View > Recording Details

The *Recording Details* dialog box displays data about the current recording session.



See also:

- **Get to Know the Log**
- **Quick Tips for Logging a Session**
- **Markers**
- **Tasks**
- **Surveys**

Customize Logging for the Session

To help you view the recording more easily, Morae allows you to customize how you view and log a session. See the following topics for more information about the various ways to customize the interface:

- **Adjust the View of the Recording Session**
- **Picture in Picture (PiP)**
- **Marker Definitions Window**

Adjust the View of the Recording Session

To make it easier to view the recording, you may need to adjust the way the video appears. You can view the screen and/or camera video being captured in several ways.

- **Normal View (default)**
- **Full Screen View**
- **Scale to Fit View**

Try the different views to find one that works well for your test. You can adjust the view at any time, prior to and during a recording.

Normal View (default)

By default, the interface opens in the *Normal* view. This view shows the recording activity within a regular window. The toolbar, status bar, menu bar, *Marker Definitions* window, and PIP window are visible by default.

Full Screen View

The Full Screen view fills the entire screen with the recording and a floating toolbar appears.

To toggle the *Full Screen* view on/off, do one of the following:

- Click the Full Screen button .
- Use the **<Alt + Enter>** hotkey.
- Choose **View > Full Screen**.

Scale to Fit View

If the recording is larger than the *Viewing window*, choose the *Scale to Fit* view. This view fits the entire recording into the Viewing window. This option is available in both *Normal* and *Full Screen* view.

To toggle the Scale to Fit option on or off, do one of the following:

- Click the **Toggle Scale-to-Fit** button .
- Use the **<Ctrl + Alt + S>** hotkey.
- Choose **View > Scale to Fit**.

See also:

- **Picture in Picture (PiP)**
- **Marker Definitions Window**

Picture in Picture (PiP)

When recording begins, a window containing the Picture in Picture (PiP) camera video appears by default in the lower right-hand corner of the *Viewing window*. You can move and resize the PiP window in the Viewing window.

PiP is best viewed with the *Scale to Fit* option turned on. If you can't find the PiP window, choose **View > Scale to Fit** and the PIP window appears in the lower right-hand corner.

Morae Recorder : Unnamed Recording
Recording Control View Marker Help
Online Tutorials
Viewing Window
Watch as the participant performs the tasks.
PiP Window
See the participant as he or she performs the tasks.
TIP: You can move and resize the PiP.
Survey: Task 2 Completion Survey
Send Survey

PIP Window Action	Description
To move the PiP window	Click in the PiP window and drag it to a different location.
To resize the PiP window	1. Point at a corner of the window with your cursor and grab the handles that appear. 2. Drag the corner out or in to make the window larger or smaller.
To hide or show the PiP window	Choose **View** > **Picture in Picture (PIP)**.

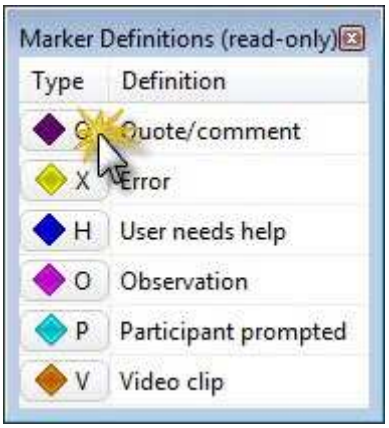
See also:

- **Adjust the View of the Recording Session**
- **Marker Definitions Window**

Marker Definitions Window

The *Marker Definitions* window displays the markers defined in the study configuration that you can use to log events and tasks during the recording.

To log a marker, click a button in the *Type* column.



The *Marker Definitions* window is visible by default. To hide the marker definitions, choose **View** > **Marker Definitions**.

See also:

- **Adjust the View of the Recording Session**
- **Picture in Picture (PiP)**

Troubleshoot Observer to Recorder Connection Issues

Trouble connecting to Recorder? Here are some answers to common questions:

- **I cannot establish a connection between Observer and Recorder. What should I do?**
- **I got disconnected during a session. What should I do?**
- **My video is lagging behind the test. Can I make the video play in Observer in real-time?**
- **We cannot use the default Main Communication Port. Can I change** it?

I cannot establish a connection between Observer and Recorder. What should I do?

If you cannot connect, check the following items::

- Is Recorder installed and open on the recording computer?
- Is the Recorder computer name (or IP address) entered in the Connect to Recorder dialog box correct?

  If the computer name does not work, use the full domain name or IP address. For information on finding the computer name or IP address, see **Choose the Recorder Computer Name or IP Address** in the **Morae Observer Help**.
- Is there another Observer connected with the same user name?
- Are the Recorder and Observer computers connected to the same LAN or WAN network? Contact your system administrator for network problems.
- Are the Observer and Recorder applications running the same version of Morae?
- Do you have Windows XP Service Pack 2? This includes its own firewall. When prompted the first time you run Recorder, select to **Unblock** the firewall.
- Is there a firewall on the network? Ask your system administrator if there is a firewall blocking the connection.
- Are Recorder and Observer set up to use the same communication ports?

  The communication protocol used by Morae is TCP/IP with listening ports established on ports 5555 and 8080. The system administrator may have to intentionally allow traffic through these ports in order for Observer to connect to Recorder.

  If these ports are already in use, you can use different ports, as long as both Recorder and Observer are set up to use the same ports. For more information, see **Change the Recorder and Observer Communication Port.**

I got disconnected during a session. What should I do?

At anytime during the session, if you get disconnected, you can reconnect to the same session.

1. In Observer, click **Connect to a Recorder** to open the *Connect to Recorder* dialog box.
2. Click **Connect**. You reconnect to the same session.

My video is lagging behind the test. Can I make the video play in Observer in real-time?

Depending on the Observer options you choose, you may experience a video delay in Observer. For more information, see **Video Delay in Observer** in the Morae Observer Help**.**

We cannot use the default Main Communication Port. Can I change it?

In some cases, Recorder and Observer cannot connect on the default communication port (5555). In this case, the study configuration in Recorder and the communication port in Observer must be set to an alternative port number.

If you change the post in Recorder, all observers must set the same port to connect. Make sure to give the port number to all potential observers.

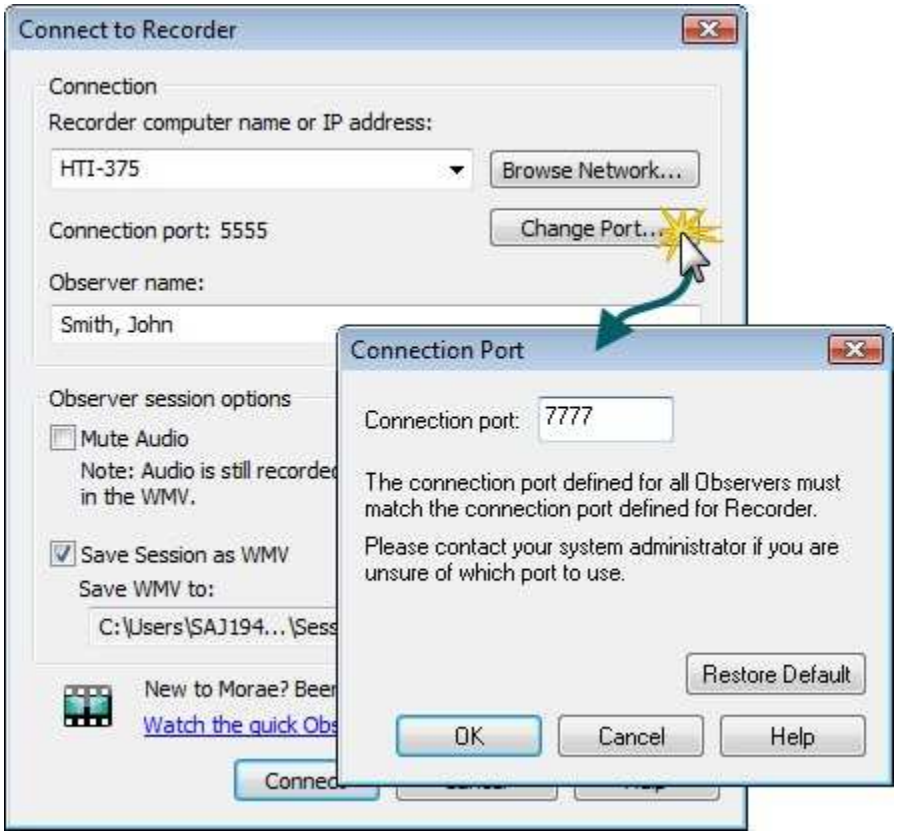
To use an alternative main communication port:

1. Contact your system administrator to determine which port to use.
2. In Recorder, select **Tools > Preferences**.
3. When the *Preferences* dialog box opens, enter the port number in the *Communication port* field.

Change Ports
Change the ports only if the defaults will not work for your network. If you change the main communication port here, all Morae Observers must set their port to match or they will be unable to connect.
Please contact your system administrator if you are unsure of which ports to use.
Communication Ports
Main communication port:
7777
High quality streaming port:
9090
Restore Defaults
OK
Cancel
Help

Observers do not need to enter the high quality streaming port. This is handled automatically by Recorder and Observer.

4. Open Observer. In the *Connect to Recorder* dialog box, click **Change Port**. Enter the new port number.
   - Click **Test Port** to verify that you can connect to Recorder with this port.
   - Click **Restore Default** to return to the default port (5555).



5. Click **OK** to apply the selected port and return to the *Connect to Recorder* dialog box.

If you have any problems with connecting on an alternative port, please contact the person who set up the session and your system administrator.

Tips and Reference Information

This section contains additional information based on some frequently asked user questions. The topics covered in this section include:

- **How Rich Recording Technology (RRT) Works**
- **Check for Upgrade Settings Options**
- **Morae Player**
- **Recording File Recovery Options**
- **Codecs in Morae**
- **Morae Recorder COM Server**
- **Record Silently**
- **Morae File Types**
- **Morae File Sizes**
- **Managing Recording Files**

How Rich Recording Technology (RRT) Works

During recording, Rich Recording Technology (RRT) collects and fuses two types of information: video input (camera video, screen video and microphone audio) and data input (keyboard entry, screen text, mouse clicks and system and application events). Morae Observer input is optional. The video streams are precisely correlated in time with the data streams.

For example, where the data streams identify when a particular toolbar button is pressed in a specific application, the screen recording shows the user pressing the toolbar button. The synchronized video and data streams are saved in a recording file you can open within Morae Manager.

When the recording file is opened and indexed by Morae Manager, users can conduct a search of the data input streams, select one of the search results and then see a specific event highlighted visually in the indexed screen video, which appears in the *Player* window.

See also:

- **Check for Upgrade Settings Options**
- **Morae Player**
- **Recording File Recovery Options**
- **Codecs in Morae**
- **Morae Recorder COM Server**

Check for Upgrade Settings Options

All three components of Morae have an automatic *Check for Upgrade* feature. The first time you open a component after installation, you are asked if you want Morae to check for available upgrades on the TechSmith site.

To manually check for an upgrade, choose **Help > Check for Upgrade > Check Now**.

To change the settings for the automatic Check for Upgrade, choose **Help** > **Check for Upgrade** > **Settings**. The *Check for Upgrade Settings* dialog appears.

The following options are available in all three components of Morae:

- **Enable automatic check for upgrade -** Morae automatically checks for available upgrades. If you disable this option, Morae does not check for upgrades.
- **Days between checks** – Define how often you want Morae to check for available upgrades by entering the number of days.
- **Prompt before checking for upgrade** - Morae displays a dialog asking whether you want to check for available upgrades. If you disable this option, the Check for Upgrade runs silently in the background (without prompting you).
- **Restore Default** - Returns the settings in this dialog to the default values.

See also:

- **How Rich Recording Technology (RRT) Works**
- **Morae Player**
- **Recording File Recovery Options**
- **Codecs in Morae**
- **Morae Recorder COM Server**

Morae Player

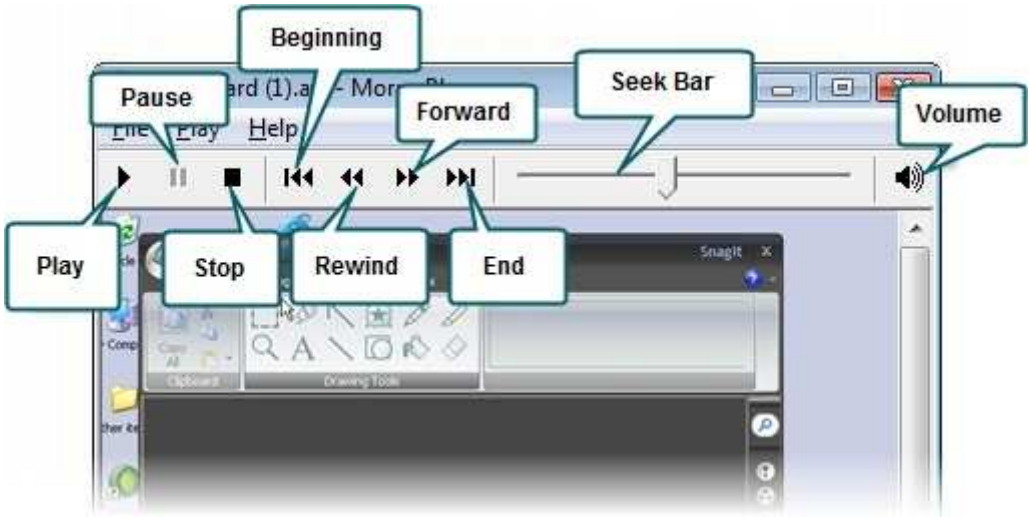
Start > All Programs > Morae > Morae Player

Morae Player is a standalone video player, optimized for playing screen recordings. Morae Player always plays videos at 100% of their original size so that they remain readable. The Player is a single .exe file that does not need any setup, nor does it use the registry or any configuration files.

Command line options allow Morae Player to be invoked in various ways from CD-ROMs, multimedia authoring tools and scripting languages or batch files. The command line options are listed in **Morae Player Command Line Customizations**.

Morae Player only plays AVI video files. Morae Player has built-in support for the TechSmith Screen Capture Codec (TSCC). This means that an AVI encoded with the TSCC codec always plays in the Morae Player, even if the TSCC codec is not installed on the system. Any other audio or video codecs required by the AVI file must be installed before Morae Player can play the video. Morae Player does not setup any shell associations to become the default AVI player.

Morae Player Playback Controls



Morae Player System Requirements

To run Morae Player, your system must meet the following requirements:

- Microsoft Windows 98, Me, NT, 2000, XP or later version.
- Windows-compatible sound card and speakers (recommended)
- 360 KB of hard-disk space for program installation
- Basic Windows multimedia and AVI file support must be installed. This is normally installed by default with Windows.
- The standard Windows MCI Microsoft Video for Windows must be installed.

To check if the Windows MCI Microsoft Video for Windows is installed:

1. Choose **Start > Control Panel > Sounds and Audio Devices > Sounds and Audio Devices > Hardware tab**.
2. Double-click on **Media Control Devices**.
3. Click on the *Properties* tab. The (MCI) Microsoft Video for Windows should appear.

Any audio or video codecs required by your AVI files must be installed. To check if a codec is installed:

1. Choose **Control Panel > Sounds and Audio Devices> Sounds and Audio Devices > Hardware tab**.
2. Double-click on the **Audio Codecs** or **Video Codecs** category. Click on the *Properties* tab the installed codecs.

See also:

- **How Rich Recording Technology (RRT) Works**
- **Check for Upgrade Settings Options**
- **Recording File Recovery Options**
- **Codecs in Morae**
- **Morae Recorder COM Server**

Morae Player Command Line Customizations

When you launch Morae Player, by default it has a title bar, a menu bar, a tool bar and a status bar. You can customize those elements by specifying arguments on the command line when launching Morae Player. If you have installed Morae Player in the default directory, the exact syntax for the command line arguments is:

```
MoraePlay.exe [<options>] [<file>]
```

where <options> can include any of the command line options described in the table below and <file> is the path to any video file (including the file name is optional). Enclose the path to the file in quotes.

For example, you could set up Morae Player to run a specific file in full screen (/F) and then exit when finished (/E), by using the following syntax:

```
MoraePlay.exe /F /E “[path to video file]”
```

If you get an error message that Morae Player cannot be found, type the entire path to the directory that contains Morae Player with the pathname in quotes. For example:
"C:\Program Files\TechSmith\Morae\MoraePlay.exe"

Morae Player Command Line Options

The following table describes all of the command line options available for Morae Player.

Command Line Option	Description
/A	Launches with “Always on top” option.
/BC RGB(255,0,255)	Sets background color; the default is black. For more information, see **Change the Morae Player Background Colors from the Command Line**.
/D	Launches without allowing “dragging” by the video area.
/E	Exits after playing the video.
/F	Launches in Full Screen mode.
/M	Launches without a menu bar.
/MX	Launches without its window maximized.
/open	Opens the specified video (<file>) but does not play it.
/play	Immediately plays the specified video (<file>); this is the default setting.
/R	Repeats the video indefinitely.
/S	Launches without a status bar.
/ST	Stays on last frame after playback.
/T	Launches without a title bar.
/TB	Launches without a tool bar.

Examples of Command Line Use with Morae Player

Play an AVI with Morae Player’s default user interface, for example:

```
MoraePlay.exe “C:\MyVideos\[name].avi”
```

Open an AVI without a menu bar, for example:

```
MoraePlay.exe /M “C:\MyVideos\[name].avi”
```

Play an AVI full screen and fill the background with dark gray if the video does not fill the entire screen, for example:

```
MoraePlay.exe /BC RGB(128,128,128) /F “C:\MyVideos\[name].avi”
```

Change the Morae Player Background Colors from the Command Line

You can change the background color for the video files displayed in Morae Player. The background color only shows when the video playing does not fill the entire frame. For example, if the player is maximized while a 360x240 video is playing, the background color fills in around the edges of the video.

By default, the background is black. To change the background color, you must specify a color argument with the syntax RGB (r,g,b) where r, g and b are the red, green and blue components of the color, respectively.

Values for r, g and b are in the range 0 to 255. For example:

- RGB(0,0,0) = black
- RGB(255,255,255) = white
- RGB(0,0,255) = blue
- RGB(255,0,255) = teal green
- RGB(128,128,128) = dark gray

How to determine the RGB values for a color

You can use Microsoft Paint to locate RGB numbers by following these steps:

1. Open Microsoft Paint.
2. Double-click on the paint box to open the *Edit Color* dialog box. Click on the **Define Custom Colors** button. The *Custom Color* palette appears.
3. Click on a color in the color grid. The spectrum appears along with the RGB color code.
4. Find a color and read the RGB values from the boxes below the color spectrum.
5. Enter the RGB code in the command line.

Recording File Recovery Options

If you experience a crash during recording, Recorder has a file recovery feature that helps determine if the data recorded prior to the crash can be recovered.

The size of the data file found may indicate how much information actually exists in the file.

If Recorder was unable to recover any recording data

If Recorder's file recovery process finds data not recoverable after a crash, a dialog appears and prompts you to archive or delete the data.

- Click **Archive** to create a zipped archive file containing the unrecoverable data. This option is helpful if you want to send the data to TechSmith for further analysis.
- Click **Delete** to permanently delete the unrecoverable data.

If Recorder finds data that might be recoverable

If Recorder's file recovery process finds data that may be recoverable after a crash, a dialog appears with the following options:

- If you want Recorder to attempt to recover the recording data immediately, select **Recover the data now**.
- If you want Recorder to place the data in the batch processing queue for processing later, select **Recover the data later**.
- If you want to permanently delete the data without recovering it, select **Delete the data from my system**.

See also:

- **How Rich Recording Technology (RRT) Works**
- **Check for Upgrade Settings Options**
- **Codecs in Morae**
- **Morae Recorder COM Server**

Codecs in Morae

The word codec stands for compressor/decompressor. A codec compresses videos down to smaller sizes, or decompresses videos for playback. A codec is the algorithm used to create a video. By default, Windows comes with many different codecs you can use in Morae. Each codec has its own set of strengths and weaknesses. Certain codecs are better to use in certain situations, because of the way they compress content. This section describes the most commonly used codecs and the ideal content they are suited for and how to select different codecs in Recorder and Manager.

The TechSmith Screen Capture Codec (TSCC) is the default codec used for recording screen video. TSCC compression is lossless and provides the highest quality and smallest file sizes for low-complexity screen content, like typical office-style application content.

The Full motion video option is the best choice for recordings created by Recorder and videos produced by Manager that contain a lot of real-world motion.

For example, use Full motion video if the recording includes a Picture in Picture (PIP) window or if you are recording a user interacting with a game or a similarly graphic-intensive application. Although lossless compression *can* be used with full-motion content, the resulting file sizes will be large. The Full motion video option results in some loss of video and audio quality, but the recording/video file sizes are manageable.

For more information on codecs, see

- **Commonly Used Codecs**
- **Full Motion Video Default Settings**
- **Lossless Video Default Settings**
- **Video Compression Setup Options**

See also:

- **How Rich Recording Technology (RRT) Works**
- **Check for Upgrade Settings Options**
- **Morae Player**
- **Recording File Recovery Options**
- **Morae Recorder COM Server**

Commonly Used Codecs

TSCC is optimized for desktop screen video, where video quality is important. There are many codecs designed to compress real-world, or full motion video. Morae can take advantage of any standard codec.

TechSmith Screen Capture Codec (TSCC)

The TechSmith Screen Capture Codec (TSCC) is the default codec used for recording screen video. TSCC compression is lossless and provides the highest quality and smallest file sizes for low-complexity screen content, like typical office-style application content.

The TSCC does not compress video that includes a Picture in Picture (PIP) window or if you are recording a user interacting with a game or a similarly graphic-intensive application well. In some cases, such as video from a camera, the file sizes of the recordings may be close to that of an uncompressed video. We do not recommend using TSCC to compress the webcam video in Morae.

Microsoft Video 1

Microsoft Video 1 is a standard video codec that comes with Windows and provides mid-range compression, with a relatively small amount of quality loss.

Microsoft Video 1 is lossy and does not compress videos as well as some of the newer video codecs, such as Microsoft Mpeg 4 V2 or, in some situations, TSCC. Using the image below, displayed in a video for 10 seconds, the TSCC compressed video was almost half the size of the video compressed with Microsoft Video 1 because TSCC is designed specifically for this type of content – mostly large, solid blocks of color. When creating a 10 second video with the tree image used earlier, the TSCC compressed video was nearly 60% larger than the Microsoft Video 1 compressed video.

Microsoft Mpeg 4 V2

The Microsoft Mpeg 4 V2 codec is very effective at compressing most types of video, but sometimes with notable quality loss. This codec, however, often produces the smallest file sizes when working with real world video, such as the tree image, or when recording applications with many gradients or dithered images. Microsoft Mpeg 4 V2 is also ideal for any application that contains a lot of movement on the screen. However, this codec's results in lower quality. While this can be controlled through the quality settings, the loss may sometimes be much more pronounced than a codec like Microsoft Video 1.

While Mpeg 4 V2 may have more quality loss than other codecs, it compresses well. When using Mpeg 4 V2 to compress a 10 second video of the tree image, the file size was 37% of the size of the TSCC compressed video and 45% of the size of the Microsoft Video 1 compressed video. Mpeg 4 V2 is the ideal codec for real world images, gradients and dithered images.

Unfortunately, Microsoft Mpeg 4 V2 is not always distributed within Windows. Most systems should have this codec available for use but not all may. If Microsoft Mpeg 4 V2 is not listed as a codec on your system, it may not be installed. Currently, Microsoft is not distributing a standard Video for Windows version of this codec, so you cannot install the codec from Microsoft's Web site. However, there are viable third party options that are very similar to Microsoft Mpeg 4 V2, such as the DivX codec.

DivX

DivX is an advanced codec created and distributed by **www.divxmovies.com**. DivX provides excellent compression with great quality, comparable and often better than Mpeg 4 V2. For general information on this codec, please visit: **http://www.divxmovies.com/codec/**

DivX is an excellent alternative to those who do not have Microsoft Mpeg 4 V2.

> DivX is not supported for the Web cam recording in Morae. DivX can only be used for the screen recording.

See also:

- **Full Motion Video Default Settings**
- **Lossless Video Default Settings**
- **Video Compression Setup Options**

Full Motion Video Default Settings

> Recorder: Machine Settings button
> Manager: Present tab > File > Produce Highlight Video.

The Full motion video option is the best choice for recordings created by Recorder and videos produced by Manager that contain a lot of real-world motion.

For example, use Full motion video if the recording includes a Picture and Picture (PIP) window or if you are recording a user interacting with a game or a similarly graphic-intensive application. Although lossless compression *can* be used with full-motion content, the resulting file sizes will be large. The Full motion video option results in some loss of video and audio quality, but the recording/video file sizes are manageable.

If you produce a video using the Full motion video option, the resulting file is in WMV format and plays back in Windows Media Player.

Recorder default codec settings for Full Motion video

Codec Type	Recording File Compression
Audio codec	Windows Media Audio
Camera video codec	Windows Media Video

Screen video codec	Microsoft Video 1

Manager default codec settings for Full Motion video

Codec Type	Video File Compression
Audio codec	Windows Media Audio
Video codec	Windows Media Video

See also:

- **Commonly Used Codecs**
- **Lossless Video Default Settings**
- **Video Compression Setup Options**

Lossless Video Default Settings

Recorder: Machine Settings button
Manager: Present tab > File > Produce Highlight Video.

The Lossless video option is the best choice for recordings and videos that contain primarily typical office-style application content. The Lossless video option uses the TSCC codec to compress screen video. TSCC compression is lossless and provides the highest quality and smallest file sizes for low-complexity screen content.

If you produce a video using the Lossless video option, you will create an AVI file that plays back in the Morae Player and other media players if the TSCC codec is available on the computer used to play the video.

Recorder default codec settings for Lossless video

Codec Type	Recording File Compression
Audio codec	Windows Media Audio
Camera video codec	Windows Media Video
Screen video codec	TSCC

Manager default codec settings for Lossless video

Codec Type	Video File Compression
Audio codec	GSM 6.10
Video codec	TSCC

See also:

- **Commonly Used Codecs**
- **Full Motion Video Default Settings**
- **Video Compression Setup Options**

Video Compression Setup Options

Recorder: Machine Settings > Screen Video tab > Custom compression > Video Compression Setup button

In the *Video Compression Setup* dialog box, you can change your screen video codec selection and adjust compression quality and key frame rate. The contents of this dialog box may differ and certain options may be disabled, depending on the screen video codec chosen. Additional configuration options for the codec may be available by clicking the **Configure** button in the *Video Compression Setup* dialog box.

Each codec has unique configuration options. For more information about a particular codec's options, consult the documentation from the company providing that codec. The following table describes the *Video Compression Setup* dialog box.

Option	Description
Compressor	Select the codec from the dropdown list.
Compression quality	Configures the codec to compress at a lower image quality and create a smaller file size, or compress at a higher image quality, resulting in a larger file size. Adjust the compression quality using the slider bar. For higher quality, move the bar to the right. For lower quality, move the bar to the left.
Key frame every (n) frames	Specify how often a key frame is recorded. We recommend that you accept the default value for the codec you have chosen. The codec places key frames at regular intervals, either spacing them by number of seconds or number of frames. Each codec has an optimized key frame setting.
Data rate (KB/Sec)	Determine the number of bytes of data the codec transmits or receives in one second. A higher data rate results in better quality and larger file sizes. If this option is available for the codec, place a checkmark in the adjacent box and specify the data rate in Kb/Sec.
Configure	Set configuration options for the selected compressor.

Video Compression Setup Configure Button

The **Configure** button in the *Video Compression Setup* dialog box allows you to customize the compression settings for the screen video codec.

This table describes the TSCC codec. Each codec has its own unique configuration options. For information on each of those options, consult the manufacturer's documentation.

The following table describes the options in the *Configure TSCC* dialog box.

Option	Description and Use
Compression Control	Use the slider bar to choose faster compression (resulting in a larger file size) or better compression (resulting in a smaller file size). In all cases, the TSCC video codec is 100% lossless. Typically, you want faster compression during recording and a smaller file size when producing/editing.

Default	Resets the **Compression Control** slider to its default configuration.

See also:

- **Commonly Used Codecs**
- **Full Motion Video Default Settings**
- **Lossless Video Default Settings**

Morae Recorder COM Server

Morae Recorder supports an out-of-process COM server that gives you access to many of its powerful recording features. This functionality can be accessed though any programming environment that supports COM. These include Visual Basic, Visual C/C++, Visual Studio.Net, Delphi and C++ Builder.

The COM Server is built into Morae Recorder. To start using it:

1. Install Recorder. This automatically makes the COM server available to other applications.
2. Next, read the Recorder COM Server documentation. This documentation is located in the Recorder COM server folder on the Recorder installation CD. The Recorder COM Server documentation can also be downloaded as a PDF from the TechSmith Web site.
3. Finally, examine and try out the sample programs (also included in the Recorder COM server folder) on the Recorder installation CD.
   Following these steps should quickly give you the information you need to begin developing with the Recorder COM Server.

See also:

- **How Rich Recording Technology (RRT) Works**
- **Check for Upgrade Settings Options**
- **Morae Player**
- **Recording File Recovery Options**
- **Codecs in Morae**

Record Silently

With Morae Recorder, you can start and stop a recording without showing the interface on the participant's desktop. This is called "silent recording" and there are three ways to record silently:

- **Record Silently by Automating Repeated Recordings**
- **Record Silently from the Command Line**
- **Record Silently with the Recorder COM Server**

Record Silently by Automating Repeated Recordings

You can automate the recording process to restart Recorder without human intervention. With this option, Recorder's interface never appears, allowing you to record silently. For more information, see **Defer Processing of Recordings**.

Record Silently from the Command Line

You can use a command line option to “silently” launch the Recorder application, load a study configuration and begin recording. When you use the command line option, the interface for Recorder never appears.

The order of command line arguments is:

```
“[path to Recorder.exe]” “[path to the configuration file]” -start
```

For example:

```
“C:\Program Files\TechSmith\Morae\MoraeRecorder.exe”
“C:\Morae\myconfig.mrcfg” -start
```

- The path to both the MoraeRecorder.exe and the configuration file must be in quotes.
- Arguments must be separated by a space.
- The “-start” argument must NOT be placed in quotes.
- You can create a shortcut for this command line option.

To create a shortcut to the command line

1. Locate the MoraeRecorder.exe.
2. Right-click on the MoraeRecorder.exe and choose **Create Shortcut**.
3. Right-click on the shortcut you created and choose **Properties**.
4. On the Shortcut page of the Properties dialog, the Target field displays the command line issued to the application for this shortcut. Add the arguments to this command line, including a configuration file name. If you do not specify a file name, Recorder uses its default settings.
5. Add the “–start” argument at the end of the command line.
6. Click **OK**. When you double-click this custom shortcut, Recorder silently launches.

Record Silently with the Recorder COM Server

Recorder supports an out-of-process COM server that provides access to many of its powerful recording features. You can use the COM server options to set up custom recording configuration and use the server to launch and stop Recorder silently. For more information, see **Morae Recorder COM Server.**

Morae File Types

The following table describes files types used with Morae.

File Extension	Description
RDG	Save a recording created in Morae Recorder to create a file with an .rdg extension. Create one recording per participant. The recording (.rdg) file includes video (camera and screen), logged markers and tasks, selected event streams (camera, microphone, keystrokes, screen text and mouse clicks) and study configuration information. If you do not move all of the rollover files (.r02, .r03, etc.) to a common folder with the .rdg file, Manager cannot import the recording. For more information, see **File Rollover for Long Recording.**
MRCFG	In Morae, you create a study configuration (.mrcfg) that contains your study information, including task definitions, marker definitions and satisfaction surveys. The study configuration file also contains recording information, including how you want to start and stop Recorder, what events you want to capture, who will log tasks in Observer and how you want to process the recordings.

MPR	In Manager, use a project file (.mpr) to organize your recordings and studies and analyze data across recordings and studies.
MPCA	Export and import project components (recordings and Title clips) to share your analysis with another user. You can bring all of your analysis from recordings in one project into another project using a Morae project component archive.
MGSRCH	Once you have created and run a couple of searches, you may find that you use one or more of them repeatedly. To make the analysis process more efficient, you can save your most commonly used search profiles in a Morae Manager Search Profile (.mgsrch) file.
CSV	Save the following data in Manager as a .csv file to open in other applications such as Microsoft Excel: ▸ Search results from the Analyze tab. ▸ Graph data from the Graph tab.
TXT	Save the Log from Observer after a session is finished in a .txt format. Import the .txt of the file into Microsoft Excel or other applications for review or to print the Log. The file is tab-delimited so if you open the file in Excel, it will open with the data in columns that match the Log.
WMV	Record content displayed in Observer and save the video as a .wmv file to immediately playback and share the recording session. Produce a highlight video in Manager as either .avi or .wmv format.
AVI	Produce a highlight video in Manager as either .avi or .wmv format.
BMP	Save a graph or screenshot from Recorder as a bitmap image (.gif) to use in other applications such as Microsoft Word or PowerPoint.
EMF	Save a graph as an bitmap image (.emf) to use in other applications such as Microsoft Word or PowerPoint.
Pack and Show EXE	Use Pack and Show to package the Morae Player along with your AVI video in a single self-extracting zipped .exe file for clients or team members to view. You do not have to worry about codec installation or know which media player is installed on a client's system.

Morae File Sizes

The following topics provide information about Morae file sizes and moving Recorder files.

Morae Recorder File Size

As a general rule, you can expect to use 10 to 15 MB per minute in a recording (.rdg) file. However, various factors determine file size and the actual content being recorded is the biggest factor.

By default, Recorder utilizes a lossless compression codec named TSCC (TechSmith Screen Capture Codec), which greatly compresses any content with solid blocks of color, for example, a standard Windows application such as Word. However, TSCC does not do a good job of compressing real world images, dithered images, gradients or other images that lack solid blocks of color.

File Rollover for Long Recordings

The maximum size for a recording (.rdg) file is approximately 600 MB (the size allowed on a CD-ROM). If a recording is long, or less compressed (depending on your codec selections), it may exceed the 600 MB file size. If this happens, Recorder creates "rollover" files so the recording can continue to be stored in 600 MB parcels. The first rollover file has the extension ".r02" and subsequent files are numbered in sequence.

When you have finished recording, you need to move the .rdg file and all of its companion rollover files together in a folder that Manager can access. When you import the .rdg file into a project, Manager automatically collects all of the associated rollover files.

> If you do not move all of the rollover files to a common folder with the .rdg file, Manager cannot import the recording.

Moving Recorder Files

During recording, always record to the hard drive of the Recorder machine. Recording over a network is not recommended because if the network gets busy, the recording can't stream the data fast enough, resulting in file corruption or failure.

Morae recording files may not fit on smaller removable storage disks (such as floppy or zip disks). If you record frequently, recording files may begin to consume hard drive space.

After the recording is completed, you have several options for saving and moving the recording files from the Recorder machine to a location accessible for Manager. If Manager and Recorder are not installed on the same computer, we recommend using one of the following methods for recording file storage and transfer:

Storage Location	Description	Moving files to Manager
Shared network directory	Save the recording files in a folder both Recorder and Manager can access.	Using Manager, browse to the shared location and import the recordings.
Hard drive and then burn to CD/DVD	During recording, save the files temporarily to the Recorder source computer's hard drive.	Burn the files to a CD or DVD and then move them to the Manager computer.
Thumb drive or portable external drive	Record directly onto a thumb drive or portable external drive to the Recorder computer. Most of these drives offer generous storage space at a reasonable price.	Disconnect the drive and reconnect it to the Manager computer. Import the recording files directly into Manager from the portable drive.

Morae Highlight Video File Size

The file size of highlight videos can vary greatly depending on the video format selected for production. AVI highlight videos are generally much larger than WMV files, with higher-quality.

Morae WMV files are often around 3 to 4MB per minute. If you need to distribute your highlight videos over the web, via email or through other limited space or low bandwidth mediums, we recommend using WMV.

Managing Recording Files

After a recording is complete, Recorder creates one recording (.rdg) file. The .rdg file for the current recording is stored in the *Folder* location defined in the study configuration.

If you did not specify a folder in the study configuration, recording files are saved in a default output folder on the Recorder computer. To view or change the default output folder location, choose **Record > Machine Settings > Preferences** tab.

Depending on the storage medium or your network configuration, you may have to take additional steps to ensure that Manager can access the recording files when you are ready to import them. For more information, see **Moving Recorder Files**.

Recording File Processing and Verification

After you complete a recording, there is a delay while the recording file is written out. Once the file is written out, there is another delay while it is automatically verified by Recorder. During verification, Recorder examines the file to verify it has been written without any errors. If an error is detected, Recorder notifies you and gives you the option to either repeat the writing out process or to delete the recording.

If you do not want to wait for file processing and verification to occur between recordings, use the batch processing feature. For more information, see **Batch Process Recordings.**